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Annotated list of the moth fauna of Anamur district (İçel Prov., South Turkey), with descriptions of new species (Lepidoptera)

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Abstract: Annotated list of the moth fauna of Anamur district (İçel Prov., South Turkey), with descriptions of new species (Lepidoptera). *Misc. Pap.* 167: 1-45, 73 figs., 1 map In this paper, 167 species of 21 families are evaluated faunistically. Totally 94 species are reported here as new to the fauna of İçel Province. Taxonomically, two new species in the families *Gelechiidae* and *Psychidae* are described. Several taxa are discussed from various standpoints. **Keywords**: *Lepidoptera*, fauna, Anamur, İçel, Turkey.

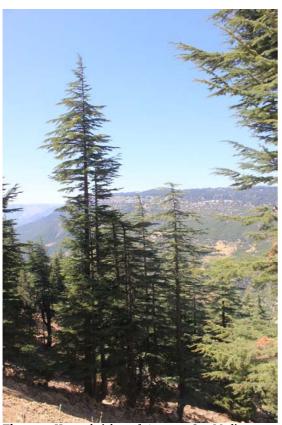


Fig. 1 — Upper heights of Anamur Oro-Mediterranean coniferous forest belt, composed of *Cedrus libani*, *Abies cilicica* and *Juniperus*, 10 9 2017, M.Kemal (Cesa)

In this paper, prepared under unfavourable conditions,² a large number of moth species are evaluated faunistically. Taxonomically, two new species, *Altenia anamuria* sp.n. (*Gelechiidae*), and *Kalliesia ruya* sp. n. (*Psychidae*) are described. Separately, some topics are highlighted here. The authors would like to draw attention to such issues that need to be seriously discussed.

As complementary works to this paper, 20 males and 6 females genitalia are illustrated here. Some of them are published for the first time. Besides, tympanal organs of 9 species (5 *Geometridae*, 4 *Pyraloidea*) are also illustrated for the first time.

Localities and their codes, where the species were observed and collected: Alaköprü 105m (33Ak), Çiçekyurdu 1620m (33Ae), Kaşyaylası 3km SW 1180m (33Aj), Pınarlar 475m (33Ad), Suolmaz Pass 1650m (33Af), Taşocağı 210m (33Ac) (see also Koçak & Kemal, 2017). On the left, the upper heights of Anamur is illustrated (Fig.1).

Collecting information and remarks are added to some species under discussion. Unless otherwise stated, all the species have been identified by the authors.

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² To the increasingly worsening working conditions in the remote area of our region (SE and E Turkey), serious military operations in our border regions were also added. All resulting new conditions negatively affects our research program, and forces us to think new strategies for working in a very limited time. Therefore, the results and the evaluations of the present work, and the oncoming papers may far from our expectations in some respects.

New records are based upon Cesa –Infosystem.³ All the materials studied are preserved in coll. Cesa-33. ⁴

List of the species

Totally 167 species of 21 moth families are listed below in alphabetical order, together with their synonymous names and original references. Faunistically 94 species are reported here as new to the fauna of İcel Province. Number of the new records are given below according to their families: Arctiidae (2), Autostichidae (1), Gelechiidae (1), Geometridae (34), Hepialidae (1), Lecithoceridae (1), Noctuidae (17), Oecophoridae (1), Pterophoridae (1), Pyralidae (31), Sphingidae (1), Thaumetopoeidae (1), Tortricidae (1), Yponomeutidae (1). Status of several species, or populations of the species are discussed from taxonomical or faunistical standpoints. For example, *Paidia* (Arctiidae), Aristotelia (Gelechiidae), Cnestrognophos (Geometridae), Charissa variegata /subtaurica (Geometridae), Eupithecia sp. (Geometridae), Selidosema (Geometridae), and Penestoglossa sp. (Psychidae). Some microlepidopteran species arenot included to this list, as the works on the identification are still ongoing. The symbol #, mentioned below, denotes nomenclaturally unavailable name (cf. ICZN).

Arctiidae

1.Arctia (Epicallia) villica (Linnaeus, 1758)

Synonym(s): villica Linnaeus,1758; corsica Oberthür,1911; niceensis Oberthür,1911; brittanica Oberthür,1911; meridionalis Heinrich,1923.

Original Reference: *Phalaena villica* Linnaeus, 1758, Syst. Nat. (Edn. 10) 1: 501. Syntypes: [Europa].

2.Eilema (Muscula) muscula (Staudinger, 1899) (Figs. 2-4)

Synonym(s): muscula Staudinger,1899

Original Reference: Lithosia muscula Staudinger,1899, Dt. ent. Z., Iris 12: 156. Type(s): [Türkei]: Giaur Dagh [Amanos Mts.].

Recently the authors reported *Eilema (Muscula) brevifurca* Wilts. from Mutki (Bitlis Prov., East Turkey) (Kemal & Koçak, 2017c). It is interesting that in both species, i.e., *brevifurca* and *muscula*, the furca of the male genitalia is developed asymmetically. Prep. no: GP988& GP2202\$\(\cap \) GP2834&. Material studied: 3&2\$\(\cap \). Anamur Alaköprü 105m (33Ak) 19 8 2015. 3&\$\(\cap \). Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

3. Euplagia quadripunctaria (Poda, 1761)

Synonym(s): quadripunctaria Poda,1761; hera Linnaeus,1767; magna Spuler,1910 nec Hol.,1897; latefasciata Bubacek,1915.

<u>Original Reference:</u> *Phalaena quadripunctaria* Poda,1761, Insecta Mus. Graecensis: 89. Type(s): [Austria]: Graz.

New to the fauna of İcel Province.

Material studied: 1 Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

4.Manulea (s.str.) complana (Linnaeus,1758) (Fig.5)

Synonym(s): complana Linnaeus,1758; ochrocephala Fourcroy,1785; sericea Gregson,1860; molybdeola Guenée,1861; balcanica Daniel,1939.

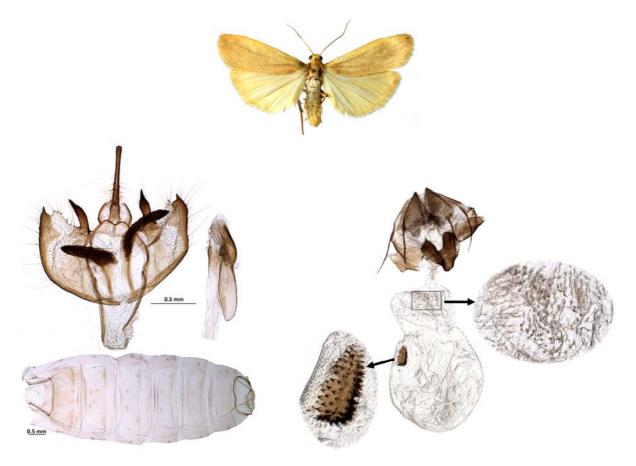
<u>Original Reference:</u> *Phalaena complana* Linnaeus,1758, Syst. Nat. (Edn.10)1: 512. Type(s): [Europa].

New to the fauna of İçel Province.

³ http://www.cesa-tr.org/Infos.htm

⁴ Cesa Collection: http://grbio.org/cool/eaaz-xyfc

Material studied: $8 \circlearrowleft \circlearrowleft$. Anamur Taşocağı 210m (33Ac) 19 8 2015. $1 \circlearrowleft 3 \circlearrowleft$. Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017. $14 \circlearrowleft \circlearrowleft$ Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 2-4 - *Eilema (Muscula) muscula.* Upperside of male (top), male genitalia and abdominal skin GP2834♂ (left), female genitalia, GP2202♀ (right). Anamur, Taşocağı 210m, 19 8 2015, M. Kemal (Cesa)

5.Paidia sp.

The nominate subgenus of *Paidia* Hbn is currently represented by the following species in Turkey: *albescens* Stgr.,1892, *brunneagrisescens* Daniel,1932, *cinerascens* H.-S.,[1847], and *rica* Frr.,[1855] (=*murina* Hbn, 1790, preocc.). The homonymy in the last species has been demonstrated for the first time by Koçak (1980: 10). The members of this genus is widely distributed in Turkey. Around Anamur, this genus is represented by an almost blackish populations of an unidentified species. Its identity will be studied separately.

Material studied: 5♂. Anamur Pınarlar 475m (33Ad) 19 8 2015. 1♂ (GP2208). Anamur Taşocağı 210m (33Ac) 19 8 2015. 13♂♀. Anamur Alaköprü 105m (33Ak), 8 9 2017, M.Kemal & A.Koçak leg. (Cesa).

Autostichidae

6.Aprominta bifasciata (Staudinger, 1870)

Synonym(s): bifasciata Staudinger,1870; virginella Rebel,1902.

New to the fauna of İçel Province.

Material studied: 3♂ Anamur Pınarlar 475m (33Ad) 19 8 2015; 5♂ Anamur Alaköprü 105m (33Ak), 8 9 2017, M.Kemal & A.Koçak leg. (Cesa).

7.Symmoca sp.

Material studied: 7Å Anamur Alaköprü 105m (33Ak), 8 9 2017, M. Kemal & A.Koçak leg. (Cesa). A very small species(wingspan about 10-11mm). Its identity will be separately studied.



Fig. 5 - Manulea (s.str.) complana. Male genitalia, GP2257\(\display\). Anamur, Taşocağı 210m, M.Kemal (Cesa)

Ctenuchidae

8. Amata rossica (Turati, 1917)

Synonym(s): #nigricornis Alpheraky,1883; nigricornis Kirby,1892 (praeocc.); rossica Turati,1917; tanaica Obraztsov,1941

Original Reference: Syntomis rossica Turati,1917, Atti Soc. ital. Sci. Nat. 56: 219, 228, t.4 fig. 4. Type \Diamond : Russia: Saratow (coll. Turati).

9.Dysauxes (s.str.) famula (Freyer,1836)

Synonym(s): famula Freyer,1836; hyalina Freyer,1845; ragusaria Zickert,1904; herthina Stauder,1921; burgeffi Draudt,1931; taurica Draudt,1931; pseudoservula Naufock,1933; pontica Friese,1959; sofiata De Laever,1983; lucana De Laever,1983.

Original Reference: Lithosia famula Freyer,1836, Neuere Beitr. 2: 143. Type(s): [Slovenien]: Fiume [Rijeka].

Material studied: 1♂ Anamur, Alaköprü 105m (33Ak) 8 9 2017; 4♂ Kaşyaylası 3km SW 1180m (33Aj), 10 9 2017; 2♂ Çiçekyurdu 1620m (33Ae), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

Gelechiidae

Totally 5 taxa of this family from Anamur district have been mentioned by the authors so far. In the last year, the authors reported this species as *Altenia* aff. *modesta* Danil. from Anamur (İçel Prov.), together with Şirvan (Siirt Pr.), and Beydağı (Malatya Pr.) records for the first time in Turkey (Kemal & Koçak, 2017b). In the same paper, the authors illustrated a male genitalia, and its 8th abdominal tergite & sternite. The affinities to *Altenia modesta* Danil. were also discussed there. Despite all these, no comment has been received so far about this interesting record from Turkey. After preparing a new male genitalia with the same perspective (*cf.* Huemer & Karsholt,1999: 259, fig.59), the important differences in the male genitalia became visible. After re-evaluation of all the genitalic characters in the male and the female, the authors came to the conclusion that this *Altenia*

species is new to the science. Taking the material collected from Anamur into consideration, this new species is described as follows:

10.Altenia anamuria sp.n.

(Figs. 6-11)

http://zoobank.org/urn:lsid:zoobank.org:act;BCFF53A9-0340-480C-905F-433FC56623AE

Holotype ♂. Forewing: 10mm, wingspan: 23mm.

Larger than Altenia modesta Danilevsky. Wing shapes and dark markings of upperside of forewing similar to modesta, but pinkish markings greatly reduced to a dirty vellowish subcostal line. Paler areas are creamy. Discal and postdiscal twin black spots developed. Ciliae almost three-coloured. Hindwing semitransparent. Ciliae slightly darker than the ground colour and long.

Male genitalia (Fig.2): Uncus bifid, broader at base. Anterior emargination of tegumen remarkably different from *modesta*. Apical tooth of aedeagus absent.

Female genitalia (Figs.3, 4): Shape of signum on bursa copulatrix, quadrate and short-toothed serrate margin instead of cross-shaped and large toothed serrate margin as in *modesta*.

Paratypes $6 \circlearrowleft \circlearrowleft$ forewing 8-11mm, wingspan 20-24mm; $10 \circlearrowleft \circlearrowleft$ forewing 9-11mm, 19-24mm.

General markings and colouration are similar to those of holotype. Subcostal line on upperside of forewing yellowish in males, reddish in females. Wing size variable.

Habitat: Mediterranean lowland vegetation between 100-200m above sea level (Fig.).

Material examined: Holotype (3) South Turkey, İçel Province, Anamur, Alaköprü 105m (33Ak), 31 3 2017; 4♂♂ Anamur, Taşocağı 210m (33Ac), 29 3 2017, 2♂♂ 10♀♀ (paratypes) Anamur, Alaköprü 105m (33Ak), 31 3 2017, M. Kemal & A.Koçak leg.

Holotype and paratypes are preserved in the biorepository Centre for Entomological Studies Ankara (Cesa).5

1♀ (image of the genitalia of *Altenia modesta* from Kyrgyzstan, prep. by Bidzilya) (Oleksiy Bidzilya, pers. comm., on 23 April 2017).

Etymology: The new species is named after the collecting place, Anamur, an historical, currently capital city of a district in İçel Province (South Turkey).

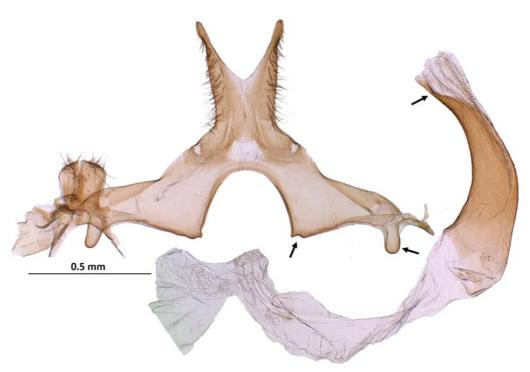
A molecular analysis of this species will be made by the authors, when appropriate conditions occur (cf. Announcement, Cesa News 150: 1).



Figs. 6, 7 - Altenia anamuria sp.n. Upperside of male (Holotype) (left), and female (paratype) (right) (before preparations). South Turkey, İçel Pr., Anamur, Alaköprü (33Ak), M. Kemal (Cesa)

⁵ Cool URI: http://grbio.org/cool/eaaz-xvfc





Figs. 8 - *Altenia anamuria* sp.n. male genitalia (holotype). GP2817. Diagnostic characters are marked with arrows. South Turkey, İçel Pr., Anamur, Alaköprü (33Ak), M. Kemal (Cesa)



Figs. 9, 10 - Female genitalia of *Altenia anamuria* sp.n. (paratypes). GP2645 $^{\circ}_{+}$ (above), GP2646 $^{\circ}_{+}$ (below). Signum separately enlarged, and its shape is diagnostic for the new species. Both from İçel Pr., Anamur, Alaköprü, M. Kemal (Cesa)



Fig. 11 - Habitat and type-locality of *Altenia anamuria* sp.n., İçel Pr., Anamur, Alaköprü (33Ak), on 31 3 2017, M. Kemal (Cesa)

11.Aristotelia sp. (Fig.12)

Its external ornamentation reminds us of an *Aristotelia* species (resembling to *decoratella* Stgr in some respects), at first sight. Due to the lack of a published revisional work on this genus, and absence of the collected material enough prevent us from doing further research. Therefore, we placed this species in the faunal list as unidentified temporarily.

Material: 1 ex. Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).



Fig. 12 - Aristotelia sp. Upperside of the moth. Anamur, M. Kemal (Cesa)

12.Caryocolum sp. (Fig.13)

Material studied: 1♀. İçel Pr., Anamur, N of Suolmaz Pass 1660m (33Af), 20 8 2015, diurnal, M. Kemal & A.Koçak leg. (Cesa)

A temporary determination. For the precise identification, more material is needed.



Fig. 13 – Female genitalia of a *Caryocolum* species (GP2250♀), with enlarged signum. Anamur, Suolmaz Pass 1660m, 20 8 2015, M. Kemal (Cesa)

13.Metzneria aprilella (Herrich-Schäffer,[1854])

Synonym(s): aprilella Herrich-Schäffer,[1854]; igneella Tengström,1859; sanguinolentella De Joannis,1910

<u>Original Reference:</u> *Parasia aprilella* Herrich-Schäffer,[1854], Schmett. Eur. 5: 207. Type: [Türkei]: "Brussa" (lost).

Recorded by the authors (Kemal & Koçak,2017b).

Material studied: 1ex. Anamur, Alaköprü 105m (33Ak) 31 3 2017; 2ex Anamur Taşocağı 210m (33Ac) 29 3 2017, M.Kemal & A.Koçak leg. (Cesa)

14. Nothris gregerseni Karsholt & Sumpich, 2015

Synonym(s): gregerseni Karsholt & Sumpich,2015

Original Reference: Nothris gregerseni Karsholt & Sumpich,2015, Zootaxa 4059 (3): 481. Holotype &: Suecia, Öl Tocknekärr, leg.O.Karsholt (ZMUC).

New to the fauna of İçel Province.

Material studied: $9 \circlearrowleft \bigcirc$ Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017. $4 \circlearrowleft \bigcirc$ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

Geometridae

15.Acanthovalva inconspicuaria (Hübner,[1819])

Synonym(s): inconspicuaria Hübner,[1819]; pumicaria Lederer,1855; osyraria Guenée,[1858]; cinerascens Butler,1875; perturbata Bastelberger,1908; cinnamomaria Rothschild,1914

Original Reference: Geometra inconspicuaria Hübner,[1819], Samml. eur. Schmett. 5: pl.97, fig.500. Type (s): Europa.

New to the fauna of Içel Province.

16.Aplasta ononaria (Fuessly,1783)

Synonym(s): ononaria Fuessly,1783; rubellata De Villers,1789; rubicapraria Hübner,1793; sudataria Hübner,[1817]; faecataria Hübner,[1819]; ononata Bellier,1861

Original Reference: *Phalaena ononaria* Fuessly,1783, Arch. Insektengesch. 3: 1-2, pl.17 6 figs. 1-5. Syntypes: Schweiz.

Material studied: 16. Anamur, Alaköprü 105m (33Ak) 8 9 2017, M.Kemal & A.Koçak leg. (Cesa)

17.Charissa (Cnestrognophos) sp. (Figs.14-16)

Last year, the authors collected some *Charissa* species from the upper heights of Anamur. Among them, four specimens were found to be closer to *mutilata/peloponnesiaria* externally (Erlacher & Erlacher, 2017). However, the male genitalia proved that this species is more similar to *mutilata*

than *peloponnesiaria*, although the wing colouration is more like to *peloponnesiaria*. For this reason, we only report the species from Anamur, for the time being. The necessary molecular analyses on this species will be made by us in the near future (*vide*, Announcement: *Cesa News* 150: 1).

Material studied: 4Å Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 14, 15 – Charissa (Cnestrognophos) sp. Upperside of male (left). Tympanal organ (before & after preparation) (right), (GP2843♂), Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M. Kemal (Cesa)

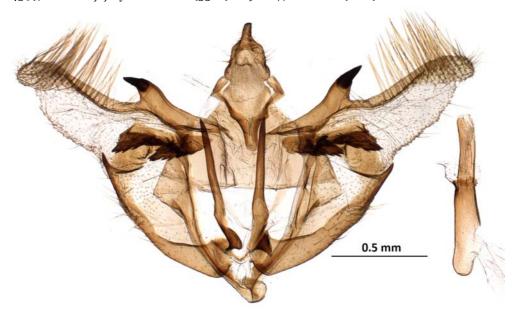
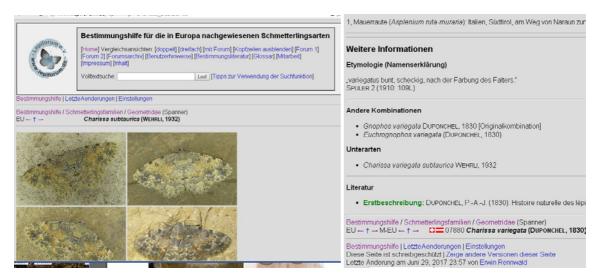


Fig. 16 – Charissa (Cnestrognophos) sp. Male genitalia (GP2843♂), Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M. Kemal (Cesa)

18.Charissa (Euchrognophos) variegata (Duponchel,1830)/subtaurica (Wehrli,1934)

Synonym(s): variegatus Duponchel,1830; rothschildi L.B.Prout,1929; #subtaurica Wehrli,1932; subtaurica Wehrli,1934

Original References: [1] Gnophos variegata Duponchel,1830, Hist. nat. lépid. pap. Fr. 8 (1): 216-217, pl.18 fig.4, pl.185 fig.8. Syntypes: France, env. Paris. [2] Gnophos variegata ssp. subtaurica Wehrli,1934, Mitt. münch. ent. Ges. 34: 54, Taf.I fig.25, 26 (attributed to the author's previous paper, ibidem 22: 9).



Figs. 17, 18 - Two images from Lepiforum. On the left, *Charissa subtaurica* is considered as a distinct species. On the right, "*subtaurica*" is considered as a subspecies "Unterart" of *Charissa variegata* Dup. Both images have been taken on the same day (10 1 2018).

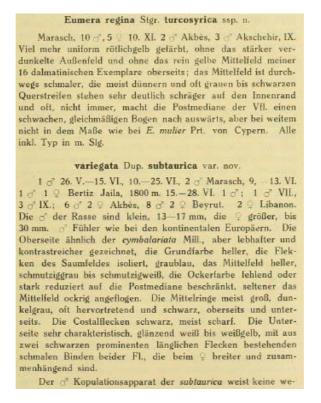


Fig. 19 - The original name combination of the description of "subtaurica" by Wehrli (1932, Mitt. Münch. ent. Ges. 22: 9). As it is seen from the figure, "subtaurica" was proposed as a variation of the species variegata Dup. but without genus name. The earlier name, described on the same page was *Eumera regina turcosyrica* ssp. n. The name "subtaurica" is nomenclaturally unavailable, due to two reasons: [1] Non-binominal, as being described without generic name. [2] Described at as a quadrinominal name. Namely, Wehrli described two taxa on the same page. He placed turcosyrica to the "subspecies" category, later he also placed "subtaurica" as "variation" category. It is well known that if two categories such "subspecies" and "variation" are at issue in the same time, "subspecies" is used for the trinominal, while "variation" for the quadrinominal name. We are of the opinion that the correct authorship and the date of publication should be as "Wehrli,1934".

It is still unclear, whether *variegata* Duponchel occurs in Turkey, or represented by its subspecies *subtaurica* Whli, or *subtaurica* occurs in Turkey alone (*cf.* **Figs. 17,18,20,21**). The authorship and date of publication of *subtaurica* are also discussed in the explanation of the **fig. 19** above.



Figs. 20, 21 – *Charissa variegata/subtaurica*. GP2760♂. Upperside (left), and underside of the male (right). İçel Pr., Anamur, Çiçekyurdu 1620m (33Ae). For the genitalia and tympanal organs, see below. M. Kemal (Cesa)



Figs. 22, 23 *− Charissa variegata/subtaurica*. GP2760 ♂. Tympanal organs (before & after preparation) (left). Male genitalia (right), İçel Pr., Anamur, Çiçekyurdu 1620m (33Ae), M. Kemal (Cesa)

19.Charissa (Kemtrognophos) zeitunaria (Staudinger,1901)

(Fig. 24-27)

Synonym(s): zeitunaria Staudinger,1901

<u>Original Reference:</u> *Gnophos obscuraria* var. *zeitunaria* Staudinger,1901, Cat. Lep. palaearkt. Faunengeb. 3(1):344,nr.3931c. Type(s): [Türkei]: "Taur.m.or." [=Zeitun].

New to the fauna of İçel Province.

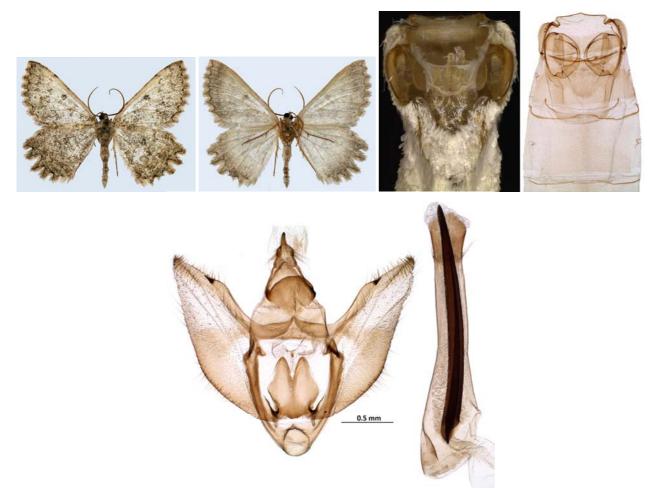
Material studied: 1Å(GP2761Å). Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

20.Coenotephria ablutaria (Boisduval,1840)

Synonym(s): #ablutaria Boisduval,1840; probaria Herrich-Schäffer,1852; ruficinctaria Guenée,[1858]; ochrearia Staudinger,1901

<u>Original Reference:</u> *Eubolia ablutaria* Boisduval,1840, Genera index meth. eur.: 203, Type: "Gall. mer." [without description; simply nomen nudum!]

Previously recorded from Anamur, and illustrated by the authors (Kemal & Koçak,2017b).



Figs. 24-27 — Charissa zeitunaria. Upper- and underside of the male (top left), tympanal organ (before and after preparation) (top right). Male genitalia (GP2761♂) (bottom). Anamur, Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal (Cesa)

21.Cyclophora puppillaria (Hübner,[1799])

Synonym(s): puppillaria Hübner,[1799]; nolaria Hübner,1809; gyrata Hübner,[1813]; gyraria Treitschke,1827; mirtalis Costa,1834; calaritana Turati,1911; asiaeminoris Amsel,1935; granti L.B.Prout,1935.

<u>Original Reference:</u> *Geometra puppillaria* Hübner,[1799], Samml. eur. Schmett. 5: pl.13, fig.69. Type: Europa.

New to the fauna of İcel Province.

Material studied: $3 \circ \bigcirc$. Anamur Taşocağı 210m (33Ac) 19 8 2015. $1 \circ \bigcirc$ Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

22.Cyclophora suppunctaria (Zeller,1847)

Synonym(s): suppunctaria Zeller,1847; amabilis Schawerda,1922; grisea Schawerda,1938.

<u>Original Reference:</u> Cabera suppunctaria Zeller,1847, Isis v. Oken 1847: 496-497. Syntypes: "Sicilia".

Previously recorded from Anamur, and also illustrated by the authors (Kemal & Koçak,2017b).

23.Dasycorsa modesta (Staudinger, 1879)

Synonym(s): *modesta* Staudinger,1879

<u>Original Reference:</u> *Dasycephala modesta* Staudinger,1879, Horae Soc. ent. ross. 14: 445. Type : [Türkei]: Taurus (Haberhauer leg.).

Common in the spring, nocturnal.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

24. Eumera turcosyrica Wehrli, 1932

Synonyms: turcosyrica Wehrli,1932; #turcosyriaca Wehrli,1934

<u>Original Reference</u>: *Eumera regina* ssp. *turcosyrica* Wehrli,1932, Mitt. münch. ent. Ges. 22: 9. Syntypes 15♂ 5♀: [Türkei]: Marasch, Akbes, Akschehir (ZFMK).

New to the fauna of İçel Province.

Material studied: 1\$\int\$. Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

Uncommon in the autumn, nocturnal.

The male genitalia of this species was illustrated by Wehrli (1934: Taf.v fig.13), with a misspelled name as "turcosyriaca".

25.Eupithecia sp. (Figs. 28-30)

The species "externally very similar to *Eupithecia quercetica* Prout, 1938 (= *buxata* Pinker, 1958). However, its genitalia unknown for me, especially the eighth sternite, which similar to those of species from *egenaria* species-group" (Mironov, pers. comm. on 16 January 2018).

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Material examined: 1♂ (GP2824) S. Turkey, İçel Pr., Anamur, Alaköprü 105m (33Ak) 31 3 2017, M. Kemal & A.Koçak leg. (Cesa)



Figs. 28-30 - *Eupithecia* sp. Upperside of male (top left), tympanal organs (before and after preparation) (top right), male genitalia and 8th sternite, GP28243 (below), South Turkey, İçel Pr. Anamur, M.Kemal (Cesa)

26.Gnopharmia rubraria Staudinger, 1892

Synonym(s): rubraria Staudinger,1892

Original Reference: Gnopharmia rubraria Staudinger, 1892, Dt. ent. Z., Iris 5: 184-185, Taf.2 f.12.

Syntypes: [Türkei]: Maras, Aintab; [Israel]: Jerusalem.

New to the fauna of İçel Province.

27. Gymnoscelis rufifasciata (Haworth, [1809])

Synonym(s): rufifasciata Haworth,[1809]; pumilata Hübner,[1813].

Original Reference: Phalaena rufifasciata Haworth,[1809], Lepid. Br. (2): 361. Syntypes: Britain (BMNH).

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

28. Hylaea fasciaria (Linnaeus, 1758)

Synonym(s): fasciaria Linnaeus,1758; prosapiaria Linnaeus,1758; neustriaria Hufnagel,1767; prasinaria [Denis & Schiffermüller],1775; biliosata De Villers,1789; viridifasciosa Esper,1794; cleui Leraut,1993 Original Reference: Phalaena fasciaria Linnaeus,1758, Syst. Nat. (Edn.10)1: 521. Type(s): [Europa].

Sihvonen et al. (2014) revised *Hylaea fasciaria* group of the West Palaearctic. The species occurs in Turkey, and represented in the Taurus Mountains by the subspecies *cedricola* Wehrli,1929 (see also Skou & Sihvonen,2015).

Material studied: 4♂ 1♀ Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017; 1♂ Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

29. Hypomecis punctinalis (Scopoli, 1763) (Figs. 31, 32)

Synonym(s): punctinalis Scopoli,1763; urticaria Hufnagel,1767; turcaria Fabricius,1775; griseonigra Goeze,1781; bandevillaea Fourcroy,1785; consortaria Fabricius,1787; convexata De Villers,1789; leucopheataria De Villers,1789 Original Reference: Phalaena punctinalis Scopoli,1763, Entomologia Carniolica: 217. Type(s): [Slovenien]: Carniolia [Krain].

Fischer & Lewandowski (2004) described a subspecies of *Hypomecis punctinalis* from Cyprus as *kerstinae*, distinguished from the nominate subspecies by the absence of discal oval marking on the hindwing. Anamur population of *punctinalis* is represented by rather darkbrown ground colouration of the upperside of wings, with well developed discal oval marking on the hindwing. New to the fauna of Icel Province.

Material studied: 5ể Anamur, Taşocağı 210m (33Ac), 19 8 2015, GP2217ể M.Kemal & A.Koçak leg. (Cesa)



Figs. 31, 32 – Hypomecis punctinalis. Upperside of male (left). Male genitalia GP2217♂ (right). İçel Pr., Anamur, Taşocağı 210m, 19 8 2015, M. Kemal (Cesa)

30.Idaea degeneraria (Hübner,[1799])

Synonym(s): degeneraria Hübner,[1799]; degenerata Treitschke,1828; floridaria Turati,1913

<u>Original Reference:</u> *Geometra degeneraria* Hübner,[1799], Samml. eur. Schmett. 5: pl.11, fig.57. Type: Europa.

New to the fauna of İçel Province.

Material studied: 1 Anamur, Alaköprü 105m (33Ak), 8 9 2017 M.Kemal & A.Koçak leg. (Cesa)

31.Idaea dimidiata (Hufnagel,1767)

Synonym(s): dimidiata Hufnagel,1767; scutulata [Denis & Schiffermüller],1775; antitaurica Wehrli,1931 nec Wehrli,1931; tauricola Wehrli,1934.

Original Reference: Phalaena dimidiata Hufnagel,1767, Berl. Mag. 4: 602. Type(s): Deutschland: Berlin.

New to the fauna of İçel Province.

Material studied: 3♂ Anamur Taşocağı 210m (33Ac) 19 8 2015; 4♂ Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

32.Idaea distinctaria (Boisduval, 1840)

Synonym(s): distinctaria Boisduval,1840; ruficostata Zeller,1849; incarnaria Herrich-Schäffer,1852

<u>Original Reference:</u> *Acidalia distinctaria* Boisduval,1840, Genera Index meth. eur. Lepid.: 224. Syntypes: France, Provence (ZFMK).

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

33.Idaea filicata (Hübner,[1799])

Synonym(s): filicata Hübner,[1799]; filicaria Duponchel,1830; levequei Leraut,2005

Original Reference: Geometra filicata Hübner,[1799], Samml. eur. Schmett. 5: pl.46, fig.238. Type: Europa.

Material studied: 1♂ Anamur Pınarlar 475m (33Ad) 19 8 2015; 1♂ Alaköprü 105m (33Ak) 8 9 2017; 1♀ Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

34. Myinodes shohami Hausmann, 1994

Synonym(s): shohami Hausmann,1994

Original Reference: Myinodes shohami Hausmann,1994, Nota lepid. 17 (1/2): 38, figs. Holotype $\hat{\bigcirc}$: Jordan (north-east): Quasr el Hallabad, 500m (ZSBS).

A rare species in the early spring. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

35.Oulobophora externaria (Herrich-Schäffer,[1848])

Synonym(s): #externata Herrich-Schäffer,1843; externaria Herrich-Schäffer,[1848]

Original Reference: Lobophora externaria Herrich-Schäffer,[1848], Syst. Bearb. Eur. Schmett. 3: 180. Type $\stackrel{\frown}{:}$: [Turkey: Istanbul Prov.]: "Constantinopel".

A very common species in the spring. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

36.Peribatodes correptarius (Zeller, 1847)

Synonym(s): correptaria Zeller,1847

Original Reference: Boarmia correptaria Zeller,1847, Isis 1847: 18-19. Syntypes: [Turkey]: Pera [Istanbul], Smyrna [=Izmir] (BMNH).

A very common species at the upper heights.

New to the fauna of Icel Province.

Material studied: 1 \circlearrowleft Anamur Pınarlar 475m (33Ad) 19 8 2015; $4\circlearrowleft4$ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; $8\circlearrowleft2$ 2 Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

37. Peribatodes rhomboidarius [Denis & Schiffermüller], 1775)

Synonym(s): #rhomboidaria [Denis & Schiffermüller],1775; inaequalis Goeze,1781; gemmaria Brahm,1791; ichnusaria Ghiliani,1852; corsicaria Schawerda,1931; saerdabensis Wehrli,1943

Material studied: $2 \circlearrowleft 1 \hookrightarrow$ Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa). New to the fauna of İçel Province.

38. Peribatodes secundarius ([Denis & Schiffermüller], 1775)

Synonym(s): #secundaria [Denis & Schiffermüller],1775; fallentaria Staudinger,1879; druentiaria Cleu,1928; syrisca Wehrli,1933; francosuevica Schneider,1942; rometschi Schneider,1942; occidentaria Lempke,1953

<u>Original Reference:</u> *Geometra secundaria* [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 101. Type(s): [Austria]: Vienna district.

New to the fauna of İçel Province.

39. Problepsis ocellata (Frivaldszky, 1845)

Synonym(s): ocellata Frivaldszky,1845; ommatophoraria Guenée,[1858]

Original Reference: Caloptera ocellata Frivaldszky,1845, Evr. Kiral. Magy. Term. Tars. 1: 185, pl.3 fig.1. Syntypes: Greece: Crete, [Turkey]: Smyrna [İzmir].

Common in the coastal region.

Material studied: $8 \circlearrowleft$ Anamur Pınarlar 475m (33Ad) 19 8 2015; $3 \circlearrowleft 2 \circlearrowleft$ Anamur, Kaşyaylası 3km SW, 1180m (33Aj), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

40. Pseudopanthera syriacata (Guenée, 1858)

Synonym(s): syriacata Guenée,1858; #syriacaria Wiltshire,1958

Original Reference: Venilia syriacata Guenée,1858, [in] Boisduval & Guenée, Hist. nat. Insectes (Spec. gén. Lépid.) 9: 113, pl. 21 fig. 2. Type \Diamond : [Lebanon]: "Beyrouth" (coll. Lederer).

Common in the spring, diurnal-nocturnal. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

41.Pseudoterpna coronillaria (Hübner,[1817])

Synonym(s): coronillaria Hübner,[1817]; cinerascens Koch,1854 nec Z.,1847; #coronilleria Rebel,1939

Original Reference: Geometra coronillaria Hübner,[1817], Samml. eur. Schmett. 5: pl. 93, figs.479-482. Syntypes: Europa.

New to the fauna of Icel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

42.Rhodometra sacraria (Linnaeus, 1767)

Synonym(s): sacraria Linnaeus,1767; labda Cramer,1777; sacralis Thunberg,1784; fulvaria Fabricius,1794; sanguinaria Esper,1801; minervae Gistl,1856; labdaria Guenée,[1858]

Original Reference: Phalaena sacraria Linnaeus,1767, Syst. Nat. (Edn.12) 1(2): 863. Syntypes: [Algeria]: Barbaria (LSL).

Common in all seasons, diurnal-nocturnal.

Material studied: 1♂ Anamur Alaköprü 105m (33Ak) 8 9 2017; 1♂ Anamur Suolmaz Pass 1660m (33Af), diurnal, 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

43. Scopula marginepunctata (Goeze, 1781)

Synonym(s): marginepunctata Goeze,1781; conjugata Borkhausen,1794; aniculosata Rambur,1829; puellaria Boisduval,1840; mutaria Heydenreich,1851; promutata Guenée,[1858]; promutaria Morris,1861; apertaria Walker,[1863]; madoniata Fuchs,1901; pastoraria Joannis,1891; #marginipunctata Rothschild,1914; britonaria Oberthür,1917; subatrata Wagner,1919; #insubrica Vorbrodt,1930

Original Reference: Phalaena marginepunctata Goeze,1781, Ent. Beytr. 3(3): 385.

New to the fauna of İçel Province.

Material studied: 1 \circlearrowleft Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; 1 \circlearrowleft Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

44.Selidosema brunnearium (De Villers,1789)

(Figs.33-36)

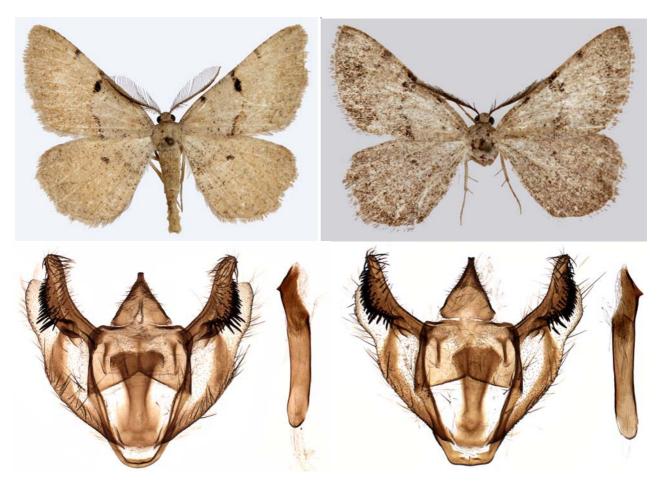
 $Synonym(s): \textit{brunnearia} \ \ De \ Villers, 1789; \textit{ericetaria} \ \ Villers, 1789; \textit{subfimbriata} \ \ Haworth, 1812; \textit{oelandica} \ \ Wahlgren, 1913.$

<u>Original Reference:</u> *Phalaena brunnearia* De Villers,1789, Caroli Linnaei Entomologia...: 325-326. In the most recent publication on this genus (Redondo & Gaston,2012), the species can be easily separated by means of their genitalia and external morphology.

Two species of the genus *Selidosema*, *brunnearium*, and *plumarium* occuring in Turkey can be confused each other, if their genitalic preparations are examined. As an unpublished faunistic information, the second author collected and prepared male genitalia of *Selidosema plumarium* from Niğde Prov. Çamardı, Demirkazık (GP7293). *Selidosema brunnearium* is widely distributed in Turkey. Two populations of this species from Anamur (İçel), and Kale (Malatya) are given here for comparison purposes. The male genitalia shows great similarity to each other. However, the external morphology and colouration from Anamur seems rather unusual. Therefore, more material is needed for further taxonomical evaluation.

New to the fauna of İçel Province.

Material studied: 1 ♂. Anamur, Taşocağı 210m (33Ac), 19 8 2015, GP2216♂ M.Kemal & A.Koçak leg. (Cesa)



Figs. 33-36 – *Selidosema brunnearium*. Upperside of males: top left: from Anamur, top right from Malatya (Kale). Male genitalia: Bottom left from Anamur, GP2216♂, bottom right from Malatya (Kale), GP2146♂, M.Kemal (Cesa)

45. Wehrliola revocaria (Staudinger, 1892)

(Figs. 37-39)

Synonym(s): revocaria Staudinger,1892; #fasciata Wagner,1931.

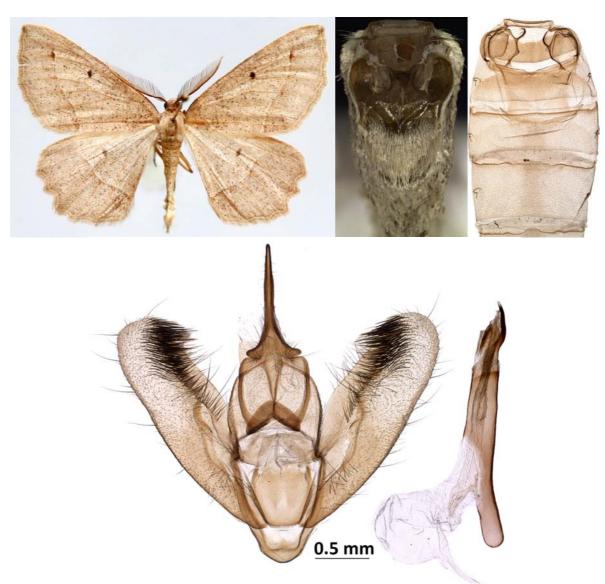
<u>Original Reference:</u> *Aspilates revocaria* Staudinger,1892, Dt. ent. Z., Iris 5: 203-204, Taf.2 f.16. Type: [Lebanon]: Beirut.

Apparently very rare, confined to the upper heights. Nocturnal.

In the updated list, Koçak & Kemal (2015) mentioned *Wehrliola* as valid generic name of Turkey. The genus is currently monotypic, represented by the species *revocaria* Stgr. This species is hitherto known from Lebanon and Turkey (Akşehir) (Wagner,1931), and Maraş (Wehrli,1934). After 84 years, the present record is new for the fauna of İçel Province.

The genitalia and the tympanal organ of this species are illustrated here for the first time.

Material studied: 1 \circlearrowleft (GP2846) Anamur, Kaşyaylası 3km SW, 1180m (33Aj), 10 9 2017; 1 \circlearrowleft Anamur, Çiçekyurdu 1620m 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 37-39 — *Wehrliola revocaria*. Upperside of male (top left). Tympanal organ (top right), male genitalia, GP2846, Anamur Kaşyaylası 3km SW 1180, M. Kemal (Cesa)

46.Xanthorhoe fluctuata (Linnaeus, 1758)

Synonym(s): fluctuata Linnaeus,1758; fibulata Hufnagel,1767; cinerata Fourcroy,1785 nec Fabr.,1781; costovata Haworth,1809; fluctuaria Boisduval,1840; multistriga Oberthür,1910

<u>Original Reference:</u> *Phalaena fluctuata* Linnaeus,1758, Syst. Nat. (Edn.10)1: 527. Type(s): [Europa].

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Gracillariidae

47. Caloptilia alchimiella (Scopoli, 1763)

Synonym(s): alchimiella Scopoli,1763; crucifera Fourcroy,1785; swederella Thunberg,1788; thunbergella Fabricius,1794; franckella Hübner,1796; thunbergii Haworth,1828; hilaripennella Treitschke,1833; sardiniella <u>Amsel,1936</u>

Original Reference: Phalaena alchimiella Scopoli,1763, Entomologia Carniolica: 254. Type(s): "Carniolia".

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

48.Phyllonorycter abrasella (Duponchel,1843)

Synonym(s): abrasella Duponchel,1843; abrasella Zeller,1846

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Hepialidae

49. Triodia amasina (Herrich-Schäffer,[1851])

Synonym(s): amasina Herrich-Schäffer,[1851]

<u>Original Reference:</u> *Hepialus amasina* Herrich-Schäffer,[1851], Syst. Bearb. Schmett. Eur. Taf. Hepial. fig.7; ibid. 6: 30. Type(s): [Türkei]: Amasia.

Apparently rare in autumn, crepuscular to nocturnal.

New to the fauna of İcel Province.

Material studied: 1\$\int\$. Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

Lasiocampidae

50.Lasiocampa grandis (Rogenhofer, 1891)

Synonym(s): grandis Rogenhofer,1891; salomonis Staudinger,[1892]

<u>Original Reference:</u> *Gastropacha trifolii* var. *grandis* Rogenhofer,1891, Verh. zool.- bot. Ges. Wien 41: 86. Syntypes ♦ "Syrien".

New to the fauna of İçel Province.

Common in Quercus woodlands, nocturnal.

Material studied: 1\$\int \text{.} Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

51.Pachypasa otus (Drury,[1773])

Synonym(s): #otus Drury,[1770]; otus Drury,[1773]

Original Reference: Sphinx otus Drury,[1773], Illustr. Nat. Hist. Exot. Ins. 2: index to 1. Type: [Turkey]: "Smyrna" [Izmir Prov.].

Uncommon in Quercus woodlands, nocturnal.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

52. Phyllodesma (s.str.) tremulifolium (Hübner, [1810])

Synonym(s): betulifolium Ochsenheimer,1810 nec Esp.,1782; tremulifolium Hübner,[1810]; danieli De Lajonquière,1963; #tremulifolium De Freina,1999

Original Reference: Bombyx tremulifolia Hübner,[1810], Samml. eur. Schmett., Bombyces 148, pl. 44 figs. 191, 192. Syntypes 🚉: Deutschland.

Material studied:36. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

Lecithoceridae

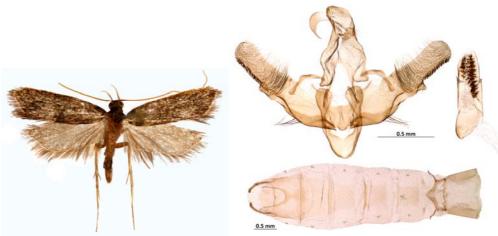
53. Homaloxestis hades Gozmany, 1978 (Figs. 40, 41)

Synonym(s): hades Gozmany,1978

Original Reference: *Homaloxestis hades* Gozmany,1978, Microlepid. Palaearct. 5: 66, pls. Holotype δ : [Türkei]: Kleinasien: Taurus: Marasch, 6-900m, 29.8.1929 (ZSM).

Gozmany (1978) described this species from Turkey (Maraş). Recently, Barton (2015) reported this species from Cyprus. *Homaloxestis hades* was hitherto known in Turkey from its type-locality only. New to the fauna of İçel Province.

Material studied:5♂ (GP2852). Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017; 1♂ Anamur Alaköprü 105m (33Ak), 8 9 2017, M.Kemal & A.Koçak leg. (Cesa)



Figs. 40, **41** - *Homaloxestis hades*. Upperside of male (left). Male genitalia, removed aedeagus and abdominal skin, GP2852, Anamur Çiçekyurdu, M. Kemal (Cesa)

Noctuidae

54.Acronicta sp.

Material studied: 13. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

55 Agrotis (Crassagrotis) bigramma (Esper,[1790])

Synonym(s): bigramma Esper,[1790]; crassa Hübner,[1803]; lata Treitschke,1835; golickei Erschoff,1872; huguenini Rühl,1891.

Original Reference: Phalaena bigramma Esper,[1790], Schmett. Abb. 4 (2/1): 490, Taf.Noct.71 Taf.150,2. Type: Erlangen (Germany) (ZSM).

56.Agrotis (Putagrotis) puta (Hübner,[1803])

Synonym(s): puta Hübner,[1803]; radius Haworth,1803; renitens Hübner,[1824]; lignosa Godart,1825; erythroxylea Treitschke,1826; radiola Stephens,1829; meridionalis Spuler,1905; minima Turati,1924; silvestrii Turati,1924; insula Richardson,1958.

Original Reference: Noctua puta Hübner,[1803], Samml. eur. Schmett., Noct. 2: Taf.52, fig.255. Type: [Europa].

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

57. Agrotis (s.str.) ipsilon (Hufnagel, 1766)

Synonym(s): ipsilon Hufnagel,1766; suffusa [Denis & Schiffermüller],1775; idonea Cramer,[1780]; spinula Esper,[1786]; spinifera De Villers,1789.

Original Reference: Phalaena ipsilon Hufnagel,1766, Berl. Mag. 4 (2): 416. Type(s): [Germany]: Berlin.

Material studied: 2♂. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017. 1♂ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

58. Agrotis (s.str.) segetum ([Denis & Schiffermüller],1775)

Synonym(s): segetum [Denis & Schiffermüller],1775; sordida [Denis & Schiffermüller],1775; undulatus Goeze,1781 (praeocc.); nigricornis De Villers,1789; segetis Fabricius,1794; catenatus Haworth,1803; monileus Haworth,1803; pectinatus Haworth,1803; connexus Haworth,1803; subatratus Haworth,1803; nigricornutus Haworth,1803; praecox Hübner,[1808]; fervida Hübner,[1824]; affinis Stephens,1829; sicula Boisduval,1840; dimidia Zeller,1847; sicania Guenée,1852; marginalis Walker,1857; aversa Walker,1857; correctus Walker,1857; obliviosus Walker,1857; denticulosus Wallengren,1860; certificata Walker,1865; conspurcatus Walker,1865; repulsus Walker,1865; ingratus Butler,1878; pallidus Staudinger,1881; lassa Swinhoe,1886.

<u>Original Reference:</u> *Noctua segetum* [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend:81,t.1,f.3. Type(s): [Austria]: Vienna district.

Material studied: 23. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

59. Antarchaea conicephala (Staudinger, 1870)

Synonym(s): conicephala Staudinger,1870 [April]; conicephala Staudinger,1870 [Oct.]; barcinonensis Milliéré,1872; fumicollis Rogenhofer,1873.

<u>Original Reference:</u> *Thalpochares conicephala* Staudinger,1870, Berl. ent. Z. 14: 121. Syntypes: [Spanien]: Catalonia, Malaga; Macedonia; [Iran]: Persia.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

60.Anthracia eriopoda (Herrich-Schäffer,[1851])

Synonym(s): eriopoda Herrich-Schäffer,[1851]; sareptae Guenée,1852; eriopodoides Strand,1916

Original Reference: Ophiusa eriopoda Herrich-Schäffer,[1851], Syst. Bearb. Schmett. Eur. 2: 403. Type (s): [Türkei]: Brussa [Bursa].

Material studied: 2\$\int\$. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

61. Autographa gamma (Linnaeus, 1758)

Synonym(s): gamma Linnaeus,1758; messmeri Schadewald,1992; voelkeri Schadewald,1992.

Original Reference: *Phalaena gamma* Linnaeus,1758, Syst. Nat. (Edn.10) 1: 513. Lectotype $\stackrel{\hookrightarrow}{:}$: [Europa], designated by Mikkola & Honey,1993.

Material studied: 1♂. Anamur Taşocağı 210m (33Ac) 19 8 2015. 1♂ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

62.Callopistria juventina (Stoll,[1782])

Synonym(s): juventina Stoll,[1782]; purpureofasciata Piller & Mitterpacher,1783; lagopus Esper,[1788]; pteridis Thunberg,1788; manicata De Villers,1789; formissimalis Hübner,1796; obscura Butler,1878

63. Callopistria latreillei (Duponchel, 1827)

Synonym(s): latreillei Duponchel,1827; quieta Treitschke,1826; roseitelum Walker,[1858]; rakoto Viette,1865; rechingeri Koutsaftikis,1973.

Original Reference: Noctua latreillei Duponchel, 1827, [in] Godart & Duponchel, Hist. nat. Lépid. Pap. Fr. 7: 327.

New to the fauna of İçel Province.

Material studied: 2 $\stackrel{?}{\circ}$. Anamur, Pınarlar 475m (33Ad) 19 8 2015; 1 $\stackrel{?}{\circ}$ Anamur Taşocağı 210m (33Ac), 19 8 2015, M.Kemal & A.Koçak leg. (Cesa)

64.Calophasia platyptera (Esper,[1788])

Synonym(s): platyptera Esper,[1788]; canterius De Villers,1789; tenera Hübner,[1803]; olbiena Duponchel,1842; subalbida Staudinger,1901; signata Constantini,1916

Original Reference: *Phalaena platyptera* Esper,[1788], Die Schmett. 4(2): 396, Taf. 130, fig.5. Type(s): [Germany]: Frankfurt.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

65.Chersotis (s.str.) margaritacea (De Villers, 1789)

 $Synonym(s): \textit{margaritacea} \ \ \text{De} \ \ \textit{Villers,1789}; \ \textit{i-intactum} \ \ \text{H\"{u}bner,[1803]}; \ \textit{\#abruzzensis} \ \ \text{Corti} \ \ \& \ \ \text{Draudt,1933}; \\ \textit{espunensis} \ \ \text{Calle,1982}$

<u>Original Reference:</u> *Phalaena margaritacea* De Villers,1789, Linn. Ent.2: 272, Taf.5, fig.16. Type(s): Europa.

Uncommon in the autumn, nocturnal.

New to the fauna of Icel Province.

Material studied: 1\$\int_{\circ}\$. Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

66.Clytie (s.str.) syriaca (Bugnion,1837)

Synonym(s): syriaca Bugnion,1837; gentilitia Freyer,1848.

Original Reference: Ophiusa syriaca Bugnion,1837, Annls Soc. ent. Fr. 1837: 442. Neotype: Turkey: Adana: Feke 6km N, 100m, leg. Hacker (ZSM).

67. Cryphia (Bryoleuca) raptricula ([Denis & Schiffermüller],1775)

Synonym(s): raptricula [Denis & Schiffermüller],1775; divisa Esper,[1791]; divisa Esper,1791; palliola Borkhausen,1792; pomula Borkhausen,1792; deceptricula Hübner,[1803]; carbonis Freyer,1849; felina Eversmann,1852; oxybiensis Millière,1875; #striata Staudinger,1879; eretina Calberla,1888; raptriculoides Turati,1912; bryophiloides Rothschild,1914; #persica Strand,1915; cretica Reisser,1962

<u>Original Reference:</u> *Noctua raptricula* [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 89. Type(s): [Austria]: Vienna district.

68.Cryphia (Bryopsis) amasina (Draudt,1931)

Synonym(s): amasina Draudt,1931.

Original Reference: Bryophila muralis amasina Draudt,1931, [in] Seitz,A., Grossschmett. Erde Suppl. 3: 19, pl.2 row g. Type: [Turkey]: "Amasia".

New to the fauna of İçel Province.

Material studied: 1♂. Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

69. Cryphia (Euthales) ochsi (Boursin, 1941)

Synonym(s): ochsi Boursin,1941; #badiofasciata Boursin,1952.

Original Reference: Bryophila ochsi Boursin,1941, Mitt. münch. ent. Ges. 31: 316-318. Holotype $\hat{\bigcirc}$. Südfrankfreich, St. Barnabé (Alpes Mmes).

70.Dichagyris (Yigoga) signifera ([Denis & Schiffermüller],1775)

Synonym(s): #signifera [Denis & Schiffermüller],1775

<u>Original Reference:</u> *Noctua signifera* [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 80. Type(s): [Austria]: Vienna district.

Common in the summer, nocturnal.

71. Dysgonia algira (Linnaeus, 1767)

Synonym(s): algira Linnaeus,1767; achatina Sulzer,1776; alterna De Villers,1789; triangularis Hübner,[1803] nec Thunb.,1784; albivitta Guenée,1852; festina Walker,1858; olympia Swinhoe,1885; europea Schawerda,1912

Original Reference: Phalaena algira Linnaeus,1767, Syst. Nat. (Edn.12) 1: 836. Type(s): Algeria.

New to the fauna of İçel Province.

Material studied: 2♂. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

72. Egira tibori Hreblay, 1994

Synonym(s): tibori Hreblay,1994

Original Reference: Egira tibori Hreblay,1994, Acta zool. hung. 40: 247, figs. Holotype $\hat{\bigcirc}$: Turkey: Prov. Maraş, 1km N of Kahramanmaraş 900m 5.iv.1994 leg. Csovari & Hreblay (coll.M.Hreblay). Common in the spring, nocturnal. Previously recorded from Anamur by the authors (Kemal &

Koçak,2017b). Previously recorded and illustrated from Anamur by the authors (Kemal & Koçak,2017b).

73. Epilecta linogrisea ([Denis & Schiffermüller], 1775)

Synonym(s): *linogrisea* [Denis & Schiffermüller],1775; *lutosa* Staudinger,1901.

<u>Original Reference:</u> *Noctua linogrisea* [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 79. Type(s): [Austria]: Vienna district.

New to the fauna of Icel Province.

Material studied: 1 \circlearrowleft . Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

74. Episema korsakovi (Christoph, 1885)

Synonym(s): korsakovi Christoph,1885; paenulata Christoph,1885.

<u>Original Reference:</u> *Agrotis korsakovi* Christoph,1885, [in] Romanoff, Mem. Lep. 2: 44, fig. Syntypes: [Aserbaidjan]: Helenendorf [=Kirovabad].

Uncommon in the autumn.

New to the fauna of İçel Province.

Material studied: 1\(\frac{1}{1}\). Anamur Cicekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

75. Eublemma (candidana-gr.) pulchralis (De Villers, 1789)

Synonym(s): pulchralis De Villers,1789; candidana Fabricius,1794; minuta Hübner,[1809]; perlana Geyer,[1830]; skafiota Freyer,1845; impura Staudinger,1871

Original Reference: Pyralis pulchralis De Villers,1789, Linn. Ent. 2: 452.

New to the fauna of İçel Province.

Material studied: 2\(\frac{1}{2}\). Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

76.Eublemma (rosina-gr.) amoenum (Hübner,[1803])

Synonym(s): respersa Hübner,1790 (praeocc.); amoena Hübner,[1803]; bithynica Bethune-Baker,1888.

<u>Original Reference:</u> *Noctua amoena* Hübner,[1803], Samml. eur. Schmett. 4: pl. 61 fig.300. Type: Europa.

77. Euxoa (s.str.) cos (Hübner,[1824])

Synonym(s): cos Hübner,[1824]; tephra Boisduval,1840; nagyagensis Freyer,1845; vacillans Herrich-Schäffer,[1850]; millierei Staudinger,1870; cycladum Staudinger,1871; aphe Mabille,1885; crimaea A.Bang-Haas,1906; mesopotamica O.Bang-Haas,1922; rubra Corti,1933.

Original Reference: Noctua cos Hübner,[1824], Samml. eur. Schmett., Noct. 2: Taf.154, fig.720. Type: [France]: Wallis.

New to the fauna of İçel Province.

Material studied: 1\$\int_{\circ}\$. Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

78. Haemerosia renalis (Hübner, [1813])

Synonym(s): renalis Hübner,[1813]

<u>Original Reference:</u> *Pyralis renalis* Hübner,[1813], Samml. eur. Schmett. Pyral.2: Taf.24 fig.157. Type(s): Europa.

79. Hecatera spinaciae (Vieweg, 1790)

Synonym(s): #dysodea [Denis & Schiffermüller],1775; spinaciae Vieweg,1790; ornata De Villers,1789; chrysozona Borkhausen,1792; ranunculina Haworth,1809; caduca Herrich-Schaffer,[1851]; innocens Staudinger,1871; subflava W.Warren,1910; faroulti Rothschild,1914; antitypina Rothschild,1914; africana Oberthür,1918; khala Rungs,1972

<u>Original Reference:</u> *Noctua spinaciae* Vieweg,1790, Tab. Verz. Brand. Schmett. 2:70. Type(s): [Germany]: Berlin.

New to the fauna of İçel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

80.Helicoverpa armigera (Hübner,[1808])

Synonym(s): obsoleta auct. nec Fabr.,1775; barbara Fabricius,1794 [rejected]; armigera Hübner,[1808]; pulverosa Walker,[1857]; uniformis Wallengren,1860; rama Bhattacherjee & Gupta,1972.

Original Reference: Noctua armigera Hübner,[1808], Samml. eur. Schmett., Noct. 2: Taf.79, fig.370. Type: [Europa].

New to the fauna of İçel Province.

Material studied: $7 \circlearrowleft \bigcirc$. Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017; $3 \circlearrowleft \bigcirc$ Anamur Alaköprü 105m (33Ak) 8 9 2017, M.Kemal & A.Koçak leg. (Cesa)

81. Heliothis peltigera ([Denis & Schiffermüller], 1775)

Synonym(s): peltigera [Denis & Schiffermüller],1775; alphea Cramer,1780; florentina Esper,[1788]; charmione Stoll,1790; straminea Donovan,1793; insulata Navas,1924.

<u>Original Reference:</u> *Noctua peltigera* [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 89. Type(s): [Austria]: Vienna district.

Material studied: 1♀ Anamur Taşocağı 210m (33Ac) 19 8 2015; 1♀ Anamur Pınarlar 475m (33Ad), 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

82.Idia calvaria ([Denis & Schiffermüller],1775)

Synonym(s): calvaria [Denis & Schiffermüller],1775; calvarialis Hübner,1818

<u>Original Reference:</u> *Noctua calvaria* [Denis & Schiffermüller], 1775, Ankündung syst. Werkes Schmett. Wienergegend: 71. Type(s): [Austria]: Vienna district.

New to the fauna of İçel Province.

Material studied: 1\(\frac{1}{3}\). Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

83. Lithophane ledereri (Staudinger, 1892)

Synonym(s): ledereri Staudinger,1892; discors Staudinger,1892

<u>Original Reference:</u> *Xylina ledereri* Staudinger,1892, Dt. ent. Z., Iris 4: 304-305. Syntypes: [Türkei]: Amasia (Kindermann leg.).

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

84.Lygephila (s.str.) amasina (Staudinger,1879)

Synonym(s): amasina Staudinger,1879; sublutea W.Warren,1913.

<u>Original Reference:</u> *Toxocampa lusoria* var. *amasina* Staudinger,1879, Horae Soc. ent. ross. 14: 428. Syntypes: [Türkei]: Amasia (Kerasdere).

Material studied: 1♂. Anamur, 3km SW Kaşyaylası, 1180m (33Aj), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

85.Metachrostis velox (Hübner,[1813])

Synonym(s): velox Hübner,[1813]; griseimargo W.Warren,1912; mendacularis Treitschke,1829; tarda Turati,1926; velocissima Turati,1926; rubescens Schwingenschuss,1930

Original Reference: Noctua velox Hübner,[1813], Samml. eur. Schmett. 4, Noctuae: Tab.108 fig.507. Type(s): Europa.

New to the fauna of İçel Province.

Material studied: 16. Anamur Alaköprü 105m (33Ak) 8 9 2017, M.Kemal & A.Koçak leg. (Cesa)

86.Minucia bimaculata Osthelder,1933

Synonym(s): bimaculata Osthelder,1933

<u>Original Reference:</u> *Minucia bimaculata* Osthelder,1933, Mitt. münch. ent. Ges. 23: 95-96. Syntypes: [Türkei]: Kahramanmaraş, Yeşildere (ZSM).

Previously recorded from Anamur by the authors (Kemal & Kocak,2017b).

87. Mythimna (Aletia) vitellina (Hübner, [1808])

Synonym(s): vitellina Hübner,[1808]; #vitellena Lederer,1870; decolorata Dannehl,1929; saturatior Dannehl,1929; grisescens Dannehl,1929.

<u>Original Reference:</u> *Noctua vitellina* Hübner,[1808], Samml. eur. Schmett.,Noct.2: Taf.81, fig.379. Type: [Europa].

Material studied: 1\$\infty\$. Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

88.Noctua (Divaena) haywardi (Tams,1926)

Synonym(s): haywardi Tams,1926; balcanica Slivov,1985

Original Reference: Lycophotia haywardi Tams,1926, Entomologist's Rec. J. Var. 38: 129-130, pl. Holotype \Diamond : Cyprus: Platres, June 1921 (Captain K.J.Hayward) (BMNH).

Uncommon in the conifer forests.

89.Noctua (Latanoctua) orbona (Hufnagel, 1766)

Synonym(s): orbona Hufnagel,1766; subsequa [Denis & Schiffermüller],1775; caroni Lempke,1964.

Original Reference: Phalaena orbona Hufnagel,1766, Berl. Mag. 3(3): 304. Type(s): [Germany]: Berlin.

90.Noctua (Paranoctua) comes (Hübner,[1813])

Synonym(s): orbona Fabricius,1787 nec Hufn.,1767; comes Hübner,[1813]; adsequa Treitschke,1825; prosequa Treitschke,1825; bergensis Sp.-Schn.,1901.

<u>Original Reference:</u> *Noctua comes* Hübner,[1813], Samml. eur. Schmett., Noct. 2: Taf.111, fig.521 Type:[Europa].

91.Nola (s.str.) cicatricalis (Treitschke,1835)

Synonym(s): cicatricalis Treitschke,1835; tuberculalis Mann,1857

<u>Original Reference:</u> *Hercyna cicatricalis* Treitschke,1835, Schmett. Eur. 10 (3): 39. Type: "Ungarn".

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

92.Nola (s.str.) cucullatella (Linnaeus,1758)

Synonym(s): cucullatella Linnaeus,1758; ludvigella Müller,1764; palliola [Denis & Schiffermüller],1775; pygmaria Fabricius,1794; palliolalis Hübner,1796; cucullatalis Haworth,1811; cucullatana Hübner,[1825]; fuliginalis Stephens,1834

Original Reference: Phalaena cucullatella Linnaeus,1758, Syst. Nat. (Edn.10)1: 537. Type(s): [Europa].

93.Nola (s.str.) ronkayorum Beshkov,2006

Synonym(s): ronkayorum Beshkov,2006

<u>Original Reference:</u> *Nola ronkayorum* Beshkov,2006, Phegea 34 (1): 18-31, figs. Holotype [♀]: Bulgaria: Eastern Rhodopi Mts. leg. Beshkov et al. (NMNHS).

Common in the spring, nocturnal. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

94. Nola subchlamydula Staudinger, 1870

Synonym(s): subchlamydula Staudinger,1870; lathonialis Milliére,1872; kruegeri Turati,1911; praetextula Chrétien,1923; infantula Kitt,1926; derasa Zerny,1933; albidula Zerny,1934

<u>Original Reference:</u> *Nola subchlamydula* Staudinger,1870, Horae Soc. ent. ross. 7: 107-109, Tab.1 figs.6,7. Syntypes ♣: Griechenland: Attica.

New to the fauna of İçel Province.

Material studied: 4♂. Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

95.Ophiusa tirhaca (Cramer,[1777])

Synonym(s): tirhaca Cramer,[1777]; #tirrhaea Fabricius,1781; vesta Esper,1789; olivacea De Villers,1789; auricularis Hübner,[1803]; separans Walker,1858; hottentota Guenée,1852; clementi Swinhoe,1918; #demarginata Heydemann et al.,1963; obscura Pinker & Bacallado,1978

Original Reference: Phalaena tirhaca Cramer,[1777], Uitl. Kapellen 2:116. Type(s): [South Africa]: Kap Horn.

96.Orthosia (Monima) cerasi (Fabricius, 1775)

Synonym(s): cerasi Fabricius,1775; stabilis [Denis & Schiffermüller],1775; obliqua De Villers,1789; junctus Haworth,1803; pallida Haworth,1809; rufannulata Haworth,1809.

<u>Original Reference:</u> *Noctua cerasi* Fabricius,1775, Syst. Ent.: 600. Syntypes: [England]: Angliae; [Germany]: Germaniae.

Vernal and nocturnal species. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

97. Orthosia (s.str.) incerta (Hufnagel, 1766)

Synonym(s): incerta Hufnagel,1766; instabilis [Denis & Schiffermüller],1775; collinita Esper,[1790]; contracta Esper,[1790]; trigutta Esper,[1790]; nebulosus Haworth,1803; subsetaceus Haworth,1803; angustus Haworth,1803; fuscatus Haworth,1803; pallida Lampa,1885 nec Hw.,1809; pallidior Staudinger,1901 nec Stgr.,1888

Original Reference: Phalaena incerta Hufnagel,1766, Berl. Mag. 3 (3): 298. Type(s): [Germany]: Berlin

Vernal and nocturnal species. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

98. Parascotia robiginosa (Staudinger, 1892)

Synonym(s): robiginosa Staudinger,1892

<u>Original Reference:</u> *Boletobia robiginosa* Staudinger,1892, Dt. ent. Z., Iris 4: 332. Syntypes: [Türkei]: Amasia, Hadjin [=Saimbeyli], Maras.

Material studied: 3♂. Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa)

99. Perigrapha (Opacographa) rorida (Frivaldsky, 1835)

Synonym(s): rorida Frivaldsky,1835; sieversi Romanoff,1885; ganimetae Kornosor & Lödl,1990

<u>Original Reference:</u> Orthosia rorida Frivaldsky,1835, Tarsas. Tud. Akad. Evkönys. 2: 272, fig.7. Type: Balkans.

Vernal and nocturnal species. Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

100.Plecoptera inquinata (Lederer, 1857)

Synonym(s): inquinata Lederer,1857; pyrami Rogenhofer,1873; amanica Osthelder,1933

<u>Original Reference:</u> *Madopa inquinata* Lederer,1857, Wien. ent. Monatschr.1:98. Type(s): [Lebanon]: Beirut.

New to the fauna of İçel Province.

Material studied: $6 \lozenge \diamondsuit$. Anamur Taşocağı 210m (33Ac) 19 8 2015. $12 \lozenge \diamondsuit$. Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

101.Spodoptera cilium Guenée, 1852

Synonym(s): cilium Guenée,1852; cycloides Guenée,1852; capicola Herrich-Schäffer,[1854]; latebrosa Lederer,1855; insignata Walker,1857; orbicularis Walker,1857; praeterita Walker,1857; procedens Walker,1857; obliterans Walker,1862; infixa Walker,1862; insulsa Walker,1865; imperviata Walker,1865; retrahens Walker,1870.

Original Reference: Spodoptera cilium Guenée, 1852, [in] Boisduval & Guenée, Hist. nat. Ins. Noct. 1: 156. Type(s): Indie (MNHNP).

New to the fauna of İçel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

102. Victrix (Rasihia) tabora (Staudinger, 1892)

Synonym(s): tabora Staudinger,1892

<u>Original Reference:</u> Bryophila tabora Staudinger,1892, Dt. ent. Z., Iris 4: 264-265. Type : [Türkei]: Aintab [= Gaziantep], 5 September (Manissadjian leg.).

New to the fauna of Icel Province.

Material studied: 26. Anamur, Pınarlar 475m (33Ad) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa)

103. Zebeeba falsalis (Herrich-Schäffer, [1839])

Synonym(s): falsalis Herrich-Schäffer,[1839]; ?dardounula Millière,1871

Original Reference: Hypena falsalis Herrich-Schäffer,[1839], [in] Panzer, Faunae Ins. Germ. (166): fig.1. Type: Sicily.

New to the fauna of İçel Province.

Notodontidae

104. Harpyia milhauseri (Fabricius, 1775)

Synonym(s): milhauseri Fabricius,1775; terrifica [Denis & Schiffermüller],1775; vidua Knoch,1781; albida Daniel,1932

<u>Original Reference:</u> Bombyx milhauseri Fabricius,1775; Syst. Ent.: 577. Type(s): [Germania]: Dresden.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Oecophoridae

105.Agonopterix purpurea (Haworth,[1811])

Synonym(s): purpurea Haworth,[1811]; vaccinella Hübner,[1813]

Original Reference: Depressaria purpurea Haworth,[1811], Lepid. Br.: 511. Type: Britain.

106.Agonopterix scopariella (Heinemann, 1870) (Figs. 42,43)

Synonym(s): scopariella Heinemann,1870; rubescens Heinemann,1870; rubropunctella Lhomme,1929; calycotomella Amsel,1958 [ssp.]

Original Reference: Depressaria scopariella Heinemann, 1870, Schmett. Dtl. Schw. (2) 2: 149.

New to the fauna of İçel Province.

Material studied: 1♀(GP2762). Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 42, **43** - *Agonopterix scopariella*. Upperside of female, and the genitalia GP2762♀. İçel Pr., Anamur, M. Kemal (Cesa)

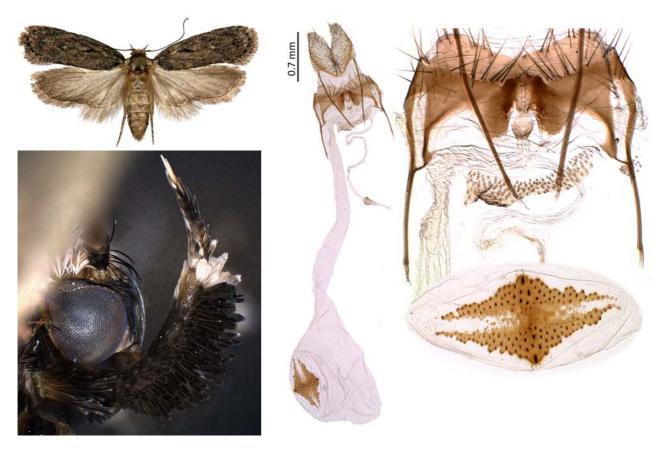
107.Diurnea fagella ([Denis & Schiffermüller],1775)

Synonym(s): #fagella [Denis & Schiffermüller],1775; pilosella Thunberg,1788; atomana Brahm,1791; fagi Fabricius,1798; disparella Schrank,1802; dormoyella Duponchel,1838; nolckenella Millière,1880 Original Reference: Tinea fagella [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 135. Type(s): [Austria]: Vienna district [without description; nomen nudum!] Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

108.Depressaria sp. (Figs.44-46)

Material studied: 1♀ (GP2765). İçel Pr., Anamur, Kaşyaylası 3km SW 1180m (33Aj), 10 9 2017, M.Kemal & A.Kocak leg. (Cesa).

The female from Anamur is illustrated below, together with lateral view of head and the genitalia. Studies on the identity of this specimen together with P. Buchner are ongoing.



Figs. 44-46 – *Depressaria* sp. Upperside of female and lateral view of head (left), female genitalia with enlarged signum (GP2765), Anamur, Kaşyaylası 3km SW, M.Kemal (Cesa)

Psychidae Typhoniinae

109. This beautiful, very small species is currently represented by a single male in our collection, observed and captured by the first author by day at the upper heights of Anamur, on 20 August 2015. Externally, similar to *Kalliesia* (Sobczyk, 2004). Presence of epiphysis on fore-tibia, and number of antennal segments, as well as well covered fore-, and hind wings by scales, having contrast colourations of both wings support this identification. Currently, the genus is represented by *irana* Sobczyk in Iran only (Sobczyk ,2011). The present specimen belongs to a different species, which is described and named below as new to the science.

Kalliesia ruya sp. n.

(Figs.47-51, 1 map)

http://zoobank.org/urn:lsid:zoobank.org:act:DE8B7A82-4464-459F-9141-3B82F53B5A1C

Holotype (male). <u>Description</u>:

Wingspan: 12mm.

Body: General colouration dark brown. Head covered by hairs irregularly. Palpus labialis reduced. Frons creamy, hairy. Antenna brown, basal part large, scaled and hairy; bipectinate, lamellae with long setae; number of pectinated segments 23. Thorax dark brown, with yellowish hairs dorsally. Fore-tibia with well developed, long epiphysis. All legs more or less covered by creamy-yellow scales.

Forewing covered by scales completely. Upperside general colouration creamy-light yellow, with dark yellow ornamentations especially at outer part. Ciliae dark yellow. Underside brown, pale brown-yellowish marginal and costal area.

Hindwing covered by scales completely. Upperside general colouration blackish-brown, with no remarkable marking. Costal area from base to middle creamy coloured. Dark brown marginal line indistinct. Apex with a few yellowish scales. Ciliae dark brown. Underside colouration dark brown completely.

Male genitalia (GP2848): At first glance it reminds *irana*. However, it is easily distinguishable by the following points: From ventral side, tegumen round, slightly indented. Sacculus well chitinized, more slender with 4 apical spines, and curved inward terminally. Anellus partly with strong teeth. Saccus more slender than that of *irana*. Aedeagus large, cylindrical and strongly curved, but without cornutus (Fig.50).

Female: Unknown.

<u>Habitat</u>: Mountain steppe in the Oro-Mediterranean coniferous forest belt, composed of *Cedrus libani*, *Abies cilicica* and *Juniperus*, with humid-semihumid mountain climate (Atalay et al., 2014) **(Fig.1)**.

<u>Distinguishing characters</u>: The new species is distinguishable from *irana* Sobc by colouration and ornamentations on upperside of forewing, by number of antennal segments, longer epiphysis, the shapes of tegumen, sacculus, anellus, and saccus.

<u>Range</u>: The genus *Kalliesia* Sobczyk is now represented by two species in West Asia: In Turkey, *ruya* sp.n., and in Iran, *irana* Sobczyk.

Material studied: 16 (holotype). South Turkey, İçel Province, Anamur, Suolmaz Pass 1660m, 20 8 2015, M. Kemal leg.

Holotype is preserved in the biorepository Centre for Entomological Studies Ankara (Cesa).6

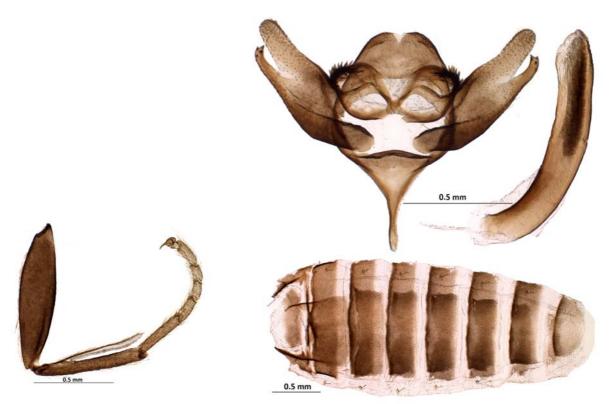
<u>Etymology</u>: The new species is named after Ms Rüya Ünal, living in Anamur. As a Turkish word "rüya" means "dream, ideal, aim, beautiful thing, etc".



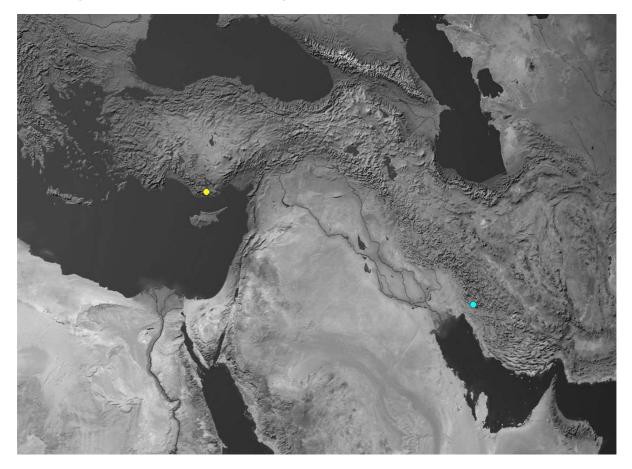
Figs. 47, **48** – *Kalliesia ruya* sp. n. – Resting position of the male (holotype) on the rock by day (left). Upperside of the same male (right). Anamur Suolmaz Pass 1650m, 20 8 2015, M. Kemal leg. (Cesa)

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⁶ Cool URI: http://grbio.org/cool/eaaz-xyfc



Figs. 49-51 - *Kalliesia ruya* sp.n. (holotype). Foreleg: Epiphysis slightly shorter than tibia (left). Male genitalia with removed aedeagus (GP2848), and abdominal skin (right), M. Kemal (Cesa)



Map 1 – Locations of two species of the genus *Kalliesia Sobc. Kalliesia ruya* sp.n. (yellow), *Kalliesia irana* Sobc. (blue), A.Koçak (Cesa)

110.Penestoglossa sp. (Figs. 52-55)

Material studied: 9♂ Anamur Alaköprü 105m. (33Ak), 8 9 2017, M. Kemal & A.Koçak leg. (Cesa) The genus is currently presented in Turkey by two species, *tauricella* Rebel and *dardoinella* Mill. The first one was described from Maraş, and distinguished at first glance by its large size (wingspan 24mm) (Rebel,1935, 1940: taf.xi fig.6). The species *dardoinella* was mentioned by Sobczyk et al. (2016) from Turkey (Bilecik, Konya). The wingspan of the species from Anamur is 14.5-16mm. According to Rebel (1940: key), the wingspan of *dardoinella* up to 17mm; Arnscheid & Weidlich (2017) mentioned the wingspan of *dardoinella* as 16-25mm in both sexes. Antennal segments of Anamur specimen are more than 27 (Fig.55). Arnscheid & Weidlich mentioned antenna with 21-25 segments. Proportion of length/width of aedeagus of *dardoinella* is 5.38 (see: Sobczyk et al., 2016: fig.13). Proportion of length/width of aedeagus of Anamur specimen is 8.55 (Fig.53). Margin of the valva remarkably emarginated in the middle (Fig.53). Under these circumstances, Anamur specimens may be considered as a different species rather than *dardoinella*, until its precise identification is fulfilled. A molecular analysis of this population will also be made by the authors, when appropriate conditions occur (*cf.* Announcement, Cesa News 150: 1).



Figs. 52-55 – *Penestoglossa* sp. – Upperside of male (left). Male genitalia, and abdominal skin (right), GP2858. Emargination of valva and slender saccus marked with arrows. Aedeagus slender, more than 8 times longer than its width. Male antenna (below). Anamur Alaköprü 105m (33Ak), M. Kemal (Cesa)

Pterophoridae

111. Stenoptilodes taprobanes (R. Felder & Rogenhofer, 1875)

Synonym(s): taprobanes R.Felder & Rogenhofer,1875; brachymorpha Meyrick,1888; seeboldi Hofmann,1898; crenulata Barnes & McDunnough,1913; phaenicodactyla Chrétien,1915; terlizzii Turati,1926; zavattarii Hartig,1953; legrandi Bigot,1962.

<u>Original Reference:</u> *Amblyptilia taprobanes* R.Felder & Rogenhofer,1875, Reise österr. Fregatte Novara, Lep. Het.: pl.140 fig.54. Type: India (BMNH).

New to the fauna of İçel Province.

Pyralidae

112.Acrobasis sp.

Material studied: 1ex Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; 1ex Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa)

113.Aglossa arcuatalis Zerny,1914

Synonym(s): arcuatalis Zerny,1914

Original Reference: Aglossa arcuatalis Zerny,1914, Annln. naturh. Mus. Wien 28 (3/4): 320, pl. xxv fig.21. Type $\hat{0}$: [Israel]: "Haifa, Syrien".

New to the fauna of İçel Province.

Material studied: 6\(\frac{1}{2}\) Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

114. Agriphila inquinatella ([Denis & Schiffermüller],1775) (Figs. 56-60)

Synonym(s): inquinatella [Denis & Schiffermüller],1775; ? arbustella Schrank,1802; nevadensis Caradja,1910.

Original Reference: Tinea inquinatella [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 134. Type(s): [Austria]: Vienna district [Types presumably destroyed by fire in 1848].

Tympanal organ of this species is illustrated here for the first time.

New to the fauna of İcel Province.

Material studied: 3ể Anamur Kaşyaylası 3km SW (33Aj), 10 9 2017; 2ể (GP2854), 1² (GP2856) Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

115. Ancylolomia palpella ([Denis & Schiffermüller], 1775) (Figs. 61-63)

Synonym(s):palpella [Denis & Schiffermüller],1775; sovinskyi Krulikovsky,1909

Original Reference: Tinea palpella [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 134. Type(s): [Austria]: Vienna district [Types presumably destroyed by fire in 1848].

Tympanal organ of this species is illustrated here for the first time.

Material studied: 1♂(GP2857) 2♀. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 56-58 - *Agriphila inquinatella*. Upperside of male (left). Tympanal organ (before and after preparation) (top right). Male genitalia, GP2854 (below), Anamur Çiçekyurdu, M. Kemal (Cesa)





Figs. 59-60 - *Agriphila inquinatella.* Lateral view of female head (above). Female genitalia, GP2856. Anamur Çiçekyurdu, M. Kemal (Cesa)



Figs. 61-63 — *Ancylolomia palpella*. Upperside male (top left), Tympanal organ (before & after preparation) (top right). Male genitalia, GP2857 (below), Anamur Çiçekyurdu, M. Kemal (Cesa)

116.Catoptria dimorphella (Staudinger, 1881) (Figs. 64-65)

Synonym(s): dimorphellus Staudinger,1881; haywardi Rebel,1939; aetnella Zerny,1943; wolfi Ganev & Hacker,1984 Original Reference: Crambus dimorphellus Staudinger,1881, Horae Soc. ent. ross. 16: 81. Lectotype ♀: [Türkei]: Amasia (Bleszynski,1965: 282).

New to the fauna of İçel Province.

Material studied: 3Å Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; 11Å Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 64, 65 - *Catoptria dimorphella*. Upperside of male (left). Male genitalia, with removed aedeagus, GP2853 (right), Anamur, M. Kemal (Cesa)

117.Cybalomia pentadalis (Lederer, 1855)

Synonym(s): pentadalis Lederer,1855

Original Reference: Botys pentadalis Lederer, 1855, Verh. zool.- bot. Ges. Wien 5: 217-218, Taf. 3 fig. 13. Syntypes 200: Libanon: Beirut.

New to the fauna of İçel Province.

Material studied: 8♂ Anamur Taşocağı 210m (33Ac) 19 8 2015; 3♂ Alaköprü 105m (33Ak) 8 9 2017, M.Kemal & A.Koçak leg. (Cesa).

118.Cynaeda (s.str.) gigantea (Staudinger, 1879)

Synonym(s): #gigantea Wocke,1871; gigantea Staudinger,1879

Original Reference: Odontia dentalis v. gigantea Staudinger,1879, Horae Soc. ent. ross. 15: 165-166. Syntypes: [Türkei]: Amasia.

New to the fauna of İçel Province.

Material studied: 1\$\infty\$. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

119.Denticera divisella (Duponchel,1842)

Synonym(s): divisella Duponchel,1842; euphorbiella Zeller,1846; albiricella Herrich-Schäffer,1849; sardzeella Amsel,1961.

Original Reference: Phycis divisella Duponchel, 1842, Hist. nat. Lépid. Pap. Fr. Suppl. 4: 126-127, pl.60 fig.9.

New to the fauna of İçel Province.

Material studied: 16. Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

120.Dioryctria mendacella (Staudinger, 1859)

Synonym(s): mendacella Staudinger,1859; #mendecella Rebel,1939

<u>Original Reference:</u> *Nephopteryx mendacella* Staudinger,1859, Stettin ent. Ztg. 20 (7/9): 222-223. Syntypes \Diamond : Spanien: Granada.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

121. Dolicharthria bruguieralis (Duponchel, 1833)

Synonym(s): bruguieralis Duponchel, 1833; coniotalis Hampson, 1903; pseudobotys Rothschild, 1913; similalis Rothschild,1915; bahrlutalis Amsel,1935; mauretanica D.Lucas,1949

<u>Original Reference:</u> Botys bruguieralis Duponchel,1833, [in] Godart, Hist. Nat. Lépid. Pap. Fr. 15: 320, Tab. 232 fig.3. Syntypes: Nismes [sic!], Corsica.

New to the fauna of İçel Province.

Material studied: 5ể Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; 9ể Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

122.Dolicharthria punctalis ([Denis & Schiffermüller],1775)

Synonym(s): punctalis [Denis & Schiffermüller],1775; longipedalis Curtis,1830

Original Reference: *Pyralis punctalis* [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 123. Type(s): [Austria]: Vienna district [Types presumably destroyed by fire in 1848].

New to the fauna of Icel Province.

123. Elegia fallax (Staudinger, 1881)

Synonym(s): fallax Staudinger,1881; atrifasciella Ragonot,1887; nigribasella Ragonot,1895; iozona Meyrick,1937; elegiella Amsel,1953

<u>Original Reference:</u> *Nephopteryx fallax* Staudinger,1881, Horae Soc. ent. ross. 16: 83. Syntypes: [Türkei]: Kleinasien, Amasia.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

124.Epischnia sp.

Material: 38 Anamur Alaköprü 105m (33Ak) 31 3 2017, M.Kemal & A.Koçak leg. (Cesa).

125. Etiella zinckenella (Treitschke, 1832)

Synonym(s): marginella Fabricius,1781 nec Den. & Schiff.,1775; zinckenella Treitschke,1832; etiella Treitschke,1835; majorellus Costa,1836; colonnellus Costa,1836; dymnusalis Walker,1859; heraldella Guenée,1862; anticalis Walker,1863; indicatalis Walker,1863; hastiferella Walker,1866; decipiens Staudinger,1870; spartiella Rondani,1876; sabulinus Butler,1879; madagascariensis Saalmüller,1880; schisticolor Zeller,1881; villosella Hulst,1887; rubribasella Hulst,1890; #tiella Pinhey,1975.

Original Reference: Phycis zinckenella Treitschke,1832, [in] Ochsenheimer, Schmett. Eur. 9 (1): 201. Lectotype : "Sizilien" (TMB).

New to the fauna of İçel Province.

Material studied: 26 Anamur Taşocağı 210m (33Ac) 31 3 2017; 16 Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

126.Euzopherodes lutisignella (Mann,1869)

Synonym(s): lutisignella Mann,1869; leonhardi Rebel,1910; scipionella Turati,1924; battella Turati,1924.

Original Reference: Myelois lutisignella Mann,1869, Verh. zool.- bot. Ges. 19: 381. Type δ : Dalmatien: Ragusa.

New to the fauna of İçel Province.

Material studied: 431 Anamur Alaköprü 105m (33Ak) 31 3 2017; 23 from same place, 8 9 2017; 13 Anamur Pınarlar 475m (33Ad) 19 8 2015, 14 Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

127. Evergestis serratalis (Staudinger, 1870)

Synonym(s): serratalis Staudinger,1870.

Original Reference: Botys (Orobena) serratalis Staudinger,1870, Horae Soc. ent. ross. 7: 193, Tab.2 fig.11. Type $\hat{\Diamond}$: Griechenland: Parnass oder Acarnanien.

New to the fauna of İcel Province.

Material studied: 11Å. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

128. Glaucocharis euchromiella (Ragonot, 1895)

Synonym(s): euchromiella Ragonot,1895; sinualis Hampson,1900; rebeli Osthelder,1941.

Original Reference: Diptychophora euchromiella Ragonot,1895, Bull. Soc. ent. Fr. 1895: xcix. Holotype $\hat{\bigcirc}$: [Turquie]: Akbes (MNHNP).

New to the fauna of İçel Province.

Material studied: 26. Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

129. Herpetogramma licarsisalis (Walker, 1859)

Synonym(s): licarsisalis Walker,1859; pharaxalis Walker,1859; immundalis Walker,[1866]; fumidalis Walker,[1866]; serotinalis De Joannis,1888; #licarsialis Rebel,1939

<u>Original Reference:</u> *Botys licarsisalis* Walker,1859, List Specimens lepid Insects Colln Br. Mus. 18: 686. Type: Borneo, Sarawak (BMNH).

It flies nocturnally on the coastal area in late summer.

New to the fauna of İçel Province.

130. Hyperlais argillacealis (Zeller, 1847)

Synonym(s): *argillacealis* Zeller,1847.

<u>Original Reference:</u> Scopula argillacealis Zeller,1847, Isis von Oken 1847: 579-580. Syntypes: Italia, Sicilia.

131. Hypsopygia costalis (Fabricius, 1775)

Synonym(s): costalis Fabricius,1775; fimbrialis [Denis & Schiffermüller],1775; purpurana Thunberg,1784; hyllalis Walker,1859; rubrocilialis Staudinger,1870; #lugens Rebel,1903; syriaca Zerny,1914; lugens Caradja,1917.

Original Reference: Phalaena costalis Fabricius,1775, Syst. Ent.: 644, nr.132. Type(s): Anglia.

New to the fauna of İcel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

132. Metaeuchromius latoides Schouten, 1997

Synonym(s): latoides Schouten,1997

<u>Original Reference:</u> <u>Metaeuchromius latoides</u> Schouten,1997, Tijdschr. Ent. 140: 119, figs.8, 25. Holotype : Turquie, [Nevsehir Prov.]: "Acigol".

Remarks: This species was reported by the authors from Anamur, as a second locality in Turkey and the genitalia of both sexes were illustrated (Kemal & Koçak, 2017a).

133.Metasia suppandalis (Hübner,[1823])

Synonym(s): *suppandalis* Hübner,[1823]

Original Reference: *Pyralis suppandalis* Hübner,[1823], Samml. eur. Schmett. 6, Pyralides: Tab.30 figs.187-190. Syntypes: Europa.

New to the fauna of İçel Province.

Material studied: $4\mathring{\circ}^{\square}$. Anamur Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).

134. Myelois (Gnathogutta) ossicolor Ragonot, 1893

Synonym(s): ossicolor Ragonot,1893

Original Reference: Myelois ossicolor Ragonot,1893, [in] Romanoff, Mém. lépid. 7: 44, pl.xxvi fig.1 [Hampson,1901]. Type \Diamond : "Mardin (Turquie d'Asie)". (coll. Staudinger).

New to the fauna of Icel Province.

135.Nomophila noctuella ([Denis & Schiffermüller],1775)

Synonym(s): noctuella [Denis & Schiffermüller],1775; hybridalis Hübner,1796; indistinctalis Walker,1859 Original Reference: Tinea noctuella [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 136. Type(s): [Austria]: Vienna district [Types presumably destroyed by fire in 1848].

New to the fauna of İçel Province.

Material studied: 1\(\frac{1}{2}\). Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

136.Palpita vitrealis (Rossi, 1794)

Synonym(s): vitrealis Rossi,1794; unionalis Hübner,1796; quinquepunctalis Boisduval,1833; transvisalis Guenée,1854; suralis Lederer,1863; septempunctalis Mabille,1880

<u>Original Reference: Phalaena vitrealis</u> Rossi,1794, Mantissa Insectorum... 2: 42. Type(s): Etruria. New to the fauna of İcel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

137.Patania balteata (Fabricius, 1798) (Figs. 66-68)

Synonym(s): balteata Fabricius,1798; crocealis Duponchel,1834; mysolalis Walker,[1866]; accipitralis Walker,[1866]; aurea Butler,1879; fraterna Moore,1886; evergestialis Strand,1918; africalis Leraut,2005

Original Reference: Phalaena balteata Fabricius, 1798, Suppl. Ent. Syst.: 457. Type(s): India.

Slamka (2013) illustrated this species very well. Therefore, our identification is based upon his work.

Tympanal organ of this species is illustrated here for the first time.

New to the fauna of Icel Province.

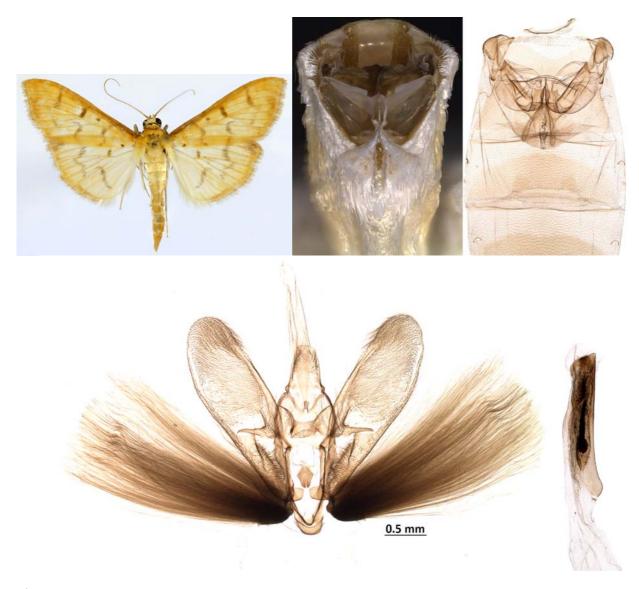
Material studied: $14 \circlearrowleft \circlearrowleft$ (GP2845 \circlearrowleft). Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

138. Pediasia matricella (Treitschke, 1832)

Synonym(s): matricella Treitschke,1832; obscura Caradja,1931; stenopterella Amsel,1949

Original Reference: *Phycis matricella* Treitschke,1832, Schmett. Eur. 9 (1): 171. Type $\hat{\bigcirc}$: Ungarn. New to the fauna of İçel Province.

Material studied: 1ể Ánamur Suolmaz Pass 1660m (33Af), diurnal, 10 9 2017, M.Kemal & A.Koçak leg. (Cesa).



Figs. 66-68 - *Patania balteata*. Upperside of male (top left). Tympanal organ (before after & preparation) (top right). Male genitalia with a pair of scent organ, GP2845, Anamur Taşocağı, M. Kemal (Cesa)

139. Pempelia alpigenella (Duponchel, 1836)

Synonym(s): alpigenella Duponchel,1836; wagnerella Freyer,1845

<u>Original Reference:</u> *Phycis alpigenella* Duponchel,1836, Hist. nat. Lépid. Papillons Fr. 10: 208, pl.280, fig.7. Syntypes: "Alpe".

140.Phlyctaenomorpha sinuosalis (Le Cerf,[1910])

Synonym(s): sinuosalis Le Cerf,[1910]; platyphaea Meyrick,1937.

Original Reference: *Phlyctoenodes* [sic!] *sinuosalis* Le Cerf,[1910], Bull. Mus. natn. Hist. nat. Paris 3 (8) (1909): 536. Type \Diamond : [Iran]: Perse: Ab-e-bid.

New to the fauna of İçel Province.

Material studied: 9♂. Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017; 1♂ Anamur Alaköprü 105m (33Ak) 8 9 2017, M.Kemal & A.Koçak leg. (Cesa).

141. Pyralis kacheticalis (Christoph, 1893)

Synonym(s): kacheticalis Christoph,1893; imperialis Caradja,1916

Original Reference: Asopia kacheticalis Christoph,1893, Dt. ent. Z., Iris 6: 96. Syntypes: "Eldar, Muganlı, Transcaucas.".

New to the fauna of İçel Province.

142. Pyrausta pavidalis Zerny, 1935

Synonym(s): pavidalis Zerny,1935; krimensis Budashkin & Martin,1993.

<u>Original Reference:</u> *Pyrausta pavidalis* Zerny,1935, [in] Osthelder, L. & E. Pfeiffer, Mitt. münch. ent. Ges. 24 (3): 101-102. Syntypes 4° 2° : [Türkei]: Marasch.

New to the fauna of İçel Province.

Material studied: 16\(\triangle \) Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

143. Pyrausta sanguinalis (Linnaeus, 1767)

Synonym(s): sanguinalis Linnaeus,1767; crentalis Scriba,1770; haematalis Hübner,[1819]

<u>Original Reference:</u> *Phalaena sanguinalis* Linnaeus,1767, Syst. Nat. (Edn.12) 1(2): 882, no.339. Lectotype 1 ex: [Lusitania] (Robinson & Nielsen, 1983: 229).

New to the fauna of İçel Province.

Material studied: 16. Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

144. Spoladea recurvalis (Fabricius, 1775)

Synonym(s): recurvalis Fabricius,1775; fascialis Cramer,[1782]; recurvella Zincken,1818; diffascialis Hübner,[1825]; albifacialis Boisduval,1833; animalis Guenée,1854; exodias Meyrick,1904; formosana Shiraki,1910.

<u>Original Reference:</u> *Phalaena recurvalis* Fabricius,1775, Syst. Ent.: 407. Type(s): Lost (Clarke,1986: 51).

New to the fauna of İçel Province.

Material studied: 16 Anamur Taşocağı 210m (33Ac) 19 8 2015, M. Kemal & A.Koçak leg. (Cesa).

145. Stemmatophora honestalis (Treitschke, 1829)

Synonym(s): honestalis Treitschke,1829; marrakechensis Leraut,2000.

<u>Original Reference:</u> *Pyralis honestalis* Treitschke,1829, Schmett. Eur. 7: 49-50. Type: Ungarn. New to the fauna of İçel Province.

146.Stemmatophora syriacalis (Ragonot, 1895)

Synonym(s): syriacalis Ragonot, 1895

Original Reference: Scotomerodes syriacalis Ragonot,1895, Bull. Soc. ent. Fr. 1895: xcvii. Type \Diamond : [Turquie]: Akbes.

New to the fauna of Icel Province.

Material studied: 6 Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa)

147.Synaphe berytalis (Ragonot, 1888) (Figs. 69-71)

Synonym(s): berytalis Ragonot,1888

Original Reference: Cledeobia berytalis Ragonot,1888, Annls Soc. ent. Fr. (6) 8: 276-277, pl.6 fig.1 (+). Syntypes (-): [Lebanon]: "Beyrouth (Syrie)".

Leraut (2014: pl.8 figs.13,14) illustrated both sexes from Beirut, type-locality of this species.

Tympanal organ and male genitalia are illustrated here for the first time.

New to the fauna of İçel Province.

Material studied: 1♂ Ånamur Taşocağı 210m (33Ac) 19 8 2015. 2♂ Anamur Alaköprü 105m (33Ak) 8 9 2017. 10♂ 1♀ (GP2855♂). Anamur, Çiçekyurdu 1620m (33Ae) 10 9 2017, M.Kemal & A.Koçak leg. (Cesa)

148. Teliphasa (Sultania) lophotalis (Hampson, 1900)

Synonym(s): lophotalis Hampson,1900

New to the fauna of İcel Province.

<u>Original Reference:</u> *Macalla lophotalis* Hampson,1900, Trans. ent. Soc. Lond. 1900 (2): 375. Syntypes \Diamond : [Turkey]: "Armenia, Zeitun [=Süleymanli]; Mardin" (coll. Staudinger).

149. Thyridiphora furia (Swinhoe, 1884)

Synonym(s): furia Swinhoe,1884; fenestrata W.Warren,1888; grisea Amsel,1968.

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Original Reference: Micra furia Swinhoe,1884, Proc. zool. Soc. Lond. 1884: 519, Pl.47 fig.13. Lectotype $\hat{\circ}$: Pakistan: "Kurrachee" [Karachi] (BMNH).

New to the fauna of İçel Province.

Material studied: 3♂ Anamur Alaköprü 105m (33Ak) 8 9 2017. 1♂ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).



Figs. 69-71 – *Synaphe berytalis.* Upperside of male (top left). Tympanal organ (before & after preparation) (top right). Male genitalia, GP2855, Anamur Çiçekyurdu, M. Kemal (Cesa)

150. Udea ferrugalis (Hübner, 1796)

Synonym(s): ferruginalis Rossi,1794 nec Fabr.,1781; ferrugalis Hübner,1796; #ferugalis Hübner,1796; martialis Guenée,1854; hypatialis Walker,1859; testacea Butler,1879

Original Reference: Pyralis ferrugalis Hübner,1796, Samml. eur. Schmett. 6,Pyralides: Tab.9 fig.54. Type(s): Europa.

New to the fauna of İçel Province.

Material studied: 1♂. Anamur Taşocağı 210m (33Ac) 19 8 2015; 1♂ Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

151. Udea languidalis (Eversmann, 1842)

Synonym(s): languidalis Eversmann,1842; arabescalis Herrich-Schäffer,1860; veneralis Staudinger,1871 Original Reference: Botys languidalis Eversmann,1842, Bull. Soc. Imp. Nat. Moscou 15 (3): 559. Type: Russia, Kasan.

New to the fauna of İçel Province.

Material studied: 2\int Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

Scythridae

152. Scythris (elegantella-gr.) limbella (Fabricius, 1775)

Synonym(s): limbella Fabricius,1775; variella [Denis & Schiffermüller],1775; quadriguttella Thunberg,1794; chenopodiella Hübner,[1813]; obscura Staudinger,1880.

Original Reference: Tinea limbella Fabricius,1775; Syst. Ent.: 660. Type(s): Germania.

Previously recorded, and the male genitalia from Anamur illustrated by the authors (Kemal & Kocak,2017b).

Material studied: 1Å (GP2651) Anamur Alaköprü 105m (33Ak), 31 3 2017; 5Å from same locality, 8 9 2017, M. Kemal & A.Koçak leg. (Cesa).

Sphingidae

153. Hyles livornica (Esper,[1780])

Synonym(s): livornica Esper,[1780]; koechlini Fuessly,1781; tatsienluica Oberthür,1916; saharae Gehlen,1932; malgassica Denso,1944; tatsienluica Oberthür,1944; renneri Eitschberger, Danner & Surholt,1998.

Original Reference: Sphinx livornica Esper, [1780], Die Schmett. 2 (13): 88. Type: Germany.

Material studied: 1♀. Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

154.Macroglossum stellatarum (Linnaeus, 1758)

Synonym(s): stellatarum Linnaeus,1758; nigra Cosmovici,1892.

Original Reference: Sphinx stellatarum Linnaeus, 1758, Syst. Nat. (Edn. 10) 1: 493.

155.Marumba quercus ([Denis & Schiffermüller],1775)

Synonym(s): quercus [Denis & Schiffermüller],1775; denisii Fuessly,1779; #brunnescens Rebel,1910; #canescens, pallescens Closs,1922; mesopotamica O.Bang-Haas,1938; schirasi O.Bang-Haas,1938; #pallida Vilarrubia,1973.

<u>Original Reference:</u> Sphinx quercus [Denis & Schiffermüller],1775, Ankündung syst. Werkes Schmett. Wienergegend: 41, Tab 1 fig.1. Type(s): Vienna district.

New to the fauna of Icel Province.

Material studied: 1\(\frac{1}{2}\). Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

156.Sphinx pinastri Linnaeus,1758

Synonym(s): pinastri Linnaeus,1758; piceae Gleditsch,1775; asiaticus Butler,1875; saniptri Strecker,1876; cenisius Jordan,1931; medialis Jordan,1931; euxinus Derzhavets,1979; selon De Freina & Witt,1987.

Original Reference: Sphinx pinastri Linnaeus,1758, Syst. Nat. (Edn.10) 1: 492. Type(s): Europe.

Material studied: 1\(\frac{1}{2}\). Anamur Pınarlar 475m (33Ad) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

Thaumetopoeidae

157. Thaumetopoea (s.str.) solitaria (Freyer,[1838])

Synonym(s): solitaria Freyer,[1838]

<u>Original Reference:</u> *Gastropacha solitaria* Freyer,[1838], Neuere Beitr. Schmettk. Abb. Natur 3: 102-103, pl.266. Type(s): "europäische Türkei".

New to the fauna of İçel Province.

Material studied: 1♂ Anamur Alaköprü 105m (33Ak) 8 9 2017; 17♂6♀ Anamur Kaşyaylası 3km SW 1180m (33Aj) 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

Thyatiridae

158. Asphalia ruficollis (Fabricius, 1787)

Synonym(s): #ruficollis [Denis & Schiffermüller],1775; ruficollis Fabricius,1787

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

159.Polyploca korbi Rebel,1901

Synonym(s): korbi Rebel,1901

Original Reference: Polyploca korbi Rebel,1901, Annln naturh. Mus. Wien 16: 167. Type $\hat{\bigcirc}$: Türkei, Akşehir (ZMHU) [see: Int. ent. Z. 24 (45): Tafel, fig.2].

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Tortricidae

160. Aethes margarotana (Duponchel, 1836) (Figs. 72, 73)

Synonym(s): margarotana Duponchel,1836; maritimana Guenée,1845; parallelana Kennel,1913; edrisitana Chrétien,1922; paronyma Meyrick,1932.

<u>Original Reference:</u> *Argyrolepia margarotana* Duponchel,1836, Hist. nat. Lépid. Papillons Fr. 9: 429, pl.258 figs. 7a-b. Type: France, Nimes.

Colouration of upperside of male from Anamur are remarkably reddish-brown.

Material studied: 6% (GP2174%, GP2175%) Anamur Taşocağı 210m (33Ac), 19 8 2015, M. Kemal & A.Koçak leg. (Cesa)



Figs. 72, 73 − *Aethes margarotana*. Upperside of male (left). Male genitalia, GP2175 \Diamond (right). Anamur, Tașocağı, M. Kemal (Cesa)

161.Bactra sp.

Material studied: 1♀. Anamur Taşocağı 210m (33Ac) 19 8 2015, M.Kemal & A.Koçak leg. (Cesa).

162. Cochylidia heydeniana (Herrich-Schäffer,[1851])

Synonym(s): heydeniana Herrich-Schäffer,[1851]; pudorana Staudinger,1859; erigenana Walsingham,1891; sabulicola Walsingham,1900; almana Kennel,1919; obraztsovi Amsel,1951; amseli Obraztsov,1956.

Original Reference: Cochylis heydeniana Herrich-Schäffer,[1851], Syst. Bearb. Schmett. Eur. 4: 187. Type: Germany.

Previously recorded and the male genitalia illustrated from Anamur by the authors (Kemal & Koçak,2017b).

163. Endothenia sororiana (Herrich-Schäffer,[1851])

Synonym(s): #sororiana Herrich-Schäffer,[1850]; sororiana Herrich-Schäffer,[1851]; phlomidana Staudinger,1871 Original Reference: Penthina sororiana Herrich-Schäffer,[1851], Syst. Bearb. Schmett. Eur. 4: 230. Type: Sicilia.

164.Kenneliola fagiglandana (Zeller,1841)

This species was recently reported by the authors from Bitlis (Mutki) (Kemal Koçak, 2017c).

New to the fauna of İçel Province.

Material: 1ex. Anamur Alaköprü 105m (33Ak) 8 9 2017, M. Kemal & A.Koçak leg. (Cesa).

165.Pammene querceti (Gozmany,1957)

Synonym(s): querceti Gozmany,1957

Original Reference: Hemimene querceti Gozmany,1957, Acta zool. Acad. Sci. Hung. 3 (1/2): 133-134, fig.8. Holotype $\hat{\bigcirc}$: Hungary, Budakeszi, Harsbokorhegy".

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

166.Pseudeulia asinana (Hübner,[1799])

Synonym(s): asinana Hübner,[1799]; vermicularis Meyrick,1935

Original Reference: [Tortrix] asinana Hübner,[1799], Samml. eur. Schmett. Tortrices: pl.16 fig.101.

Type: Europe.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

Yponomeutidae

167. Plutella (s.str.) xylostella (Linnaeus, 1758)

Synonym(s): xylostella Linnaeus,1758; cinerea Fourcroy,1785 nec Hufn.,1766; xylostei Fabricius,1798; maculipennis Curtis,1832; niveella Zeller,1839; cruciferarum Zeller,1843; brassicella Fitch,1856; limbipennella Clemens,1860; mollipedella Clemens,1860; cicerella Rondani,1876; dubiosella Beutenmüller,1889; albovenosa Walsingham,1897; megapterella Bentinck,1943; karsholtella Baraniak,2003

Original Reference: Phalaena Tinea xylostella Linnaeus, 1758, Syst. Nat. (Edn. 10) 1: 538.

Previously recorded from Anamur by the authors (Kemal & Koçak,2017b).

New to the fauna of İçel Province.

Material: 13. Anamur Çiçekyurdu 1620m (33Ae), 10 9 2017, M. Kemal & A.Koçak leg. (Cesa).

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